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HOLLOMAN AIR FORCE BASE, NEW MEXICO

24 February 2015

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New Mexico Environment Department
Attn: Mr. John Kieling, Chief
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Dear Mr. Kieling

Holloman Air Force Base is pleased to submit the Final 2013 Annual Performance Monitoring Progress Report for SS-61 Building 1001 Fuel Spill Site (AOC 1001) 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 (575) 572-3931 or by e-mail at deanna.rothhaupt@holloman.af.mil.

Sincerely

DEANNA ROTHHAUPT, GS-12, DAFC

Attachment:
Final 2013 Annual Performance Monitoring Progress Report for SS-61 Building 1001 Fuel Spill Site (AOC 1001)

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FINAL

2013 ANNUAL PERFORMANCE MONITORING PROGRESS REPORT

SS-61 BUILDING 1001 FUEL SPILL SITE (AOC 1001)

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
Omaha District
1616 Capitol Avenue
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Contract No. W9128F-10-D-0006
Task Order No. 0001

March 2014

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FINAL
2013 ANNUAL PERFORMANCE MONITORING PROGRESS REPORT
SS-61 BUILDING 1001 FUEL SPILL SITE (AOC 1001)
HOLLOMAN AIR FORCE BASE, NEW MEXICO

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- Appendix B – Monitoring Well Sample Collection Forms
- Appendix C – Laboratory Analytical Results (Provided on Enclosed CD)
- Appendix D – Data Validation Reports

ACRONYMS AND ABBREVIATIONS

AAF	Army Air Field
AF Fm	Air Force Form
AISEB	Aerobic In Situ Enhanced Bioremediation
AOC	Area of Concern
AST	Aboveground storage tank
AVGAS	Aviation Gasoline
bgs	Below ground surface
Bhate	Bhate Environmental Associates, Inc.
BOD	Biological oxygen demand
ºC	Degrees Celsius
CES/CEAN	Civil Engineering Squadron/Environmental Asset Management
CME	Central Mining Equipment
COD	Chemical oxygen demand
1,2-DCA	1,2-Dichloroethane
DO	Dissolved oxygen
DRO	Diesel range organics
Eh	Redox potential
ft	Feet/foot
FWENC	Foster Wheeler Environmental Corporation
GRO	Gasoline range organics
GTI	Groundwater Technology, Inc
HAFB	Holloman Air Force Base
HHMSSL	Human Health Medium Specific Screening Level
J	Laboratory data qualifier denoting an estimated result
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
µg/kg	Micrograms per kilogram
µg/L	Micrograms per liter
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
MNA	Monitored natural attenuation
mV	Millivolt
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
ORO	Oil range organics
ORP	Oxidation reduction potential
PAH	Polycyclic Aromatic Hydrocarbon
PCS	Petroleum contaminated soil
PID	Photoionization detector
ppm	Parts per million
PRG	Preliminary Remediation Goal

ACRONYMS AND ABBREVIATIONS (CONTINUED)

QA	Quality assurance
QAPP	Quality Assurance Project Plan
QC	Quality control
RBC	Risk Based Concentration
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RPD	Relative percent difference
RSL	Regional screening level
SOP	Standard Operating Procedure
SS-61	Spill Site 61
SM	Standard Method
SSL	Soil screening level
SVCM	Supplemental Voluntary Corrective Measures
SVOC	Semi-volatile organic compound
TDS	Total dissolved solids
TKN	Total Kjeldahl nitrogen
TPH	Total petroleum hydrocarbons
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VOC	Volatile organic compound

1 INTRODUCTION

This Annual Progress Report documents the Performance Monitoring, completed during 2013, at the Building 1001 Fuel Spill Site (SS-61) located on Holloman Air Force Base (HAFB), near Alamogordo, New Mexico. Site SS-61 is listed as Area of Concern (AOC) 1001 in Appendix 4-A (Table A) of the Holloman Air Force Base Permit No. NM6572124422 (New Mexico Environment Department [NMED], 2004). In 2013, Bhate Environmental Associates, Inc. (Bhate) conducted four quarterly groundwater sampling events (third quarter [January], fourth quarter [April], fifth quarter [July], sixth quarter [October]) along with two semiannual soil sampling events, (second semiannual [April], and third semiannual [October]) as part of the Supplemental Voluntary Corrective Measures (SVCM) for Site SS-61 under contract W9128F-10-D-0006, Task Order No. 0001 for the United States Army Corps of Engineers (USACE), Omaha District. The 2013 performance monitoring sampling events were conducted in accordance with the approved *Final Supplemental Voluntary Corrective Measures Work Plan Site SS-61 Building 1001 Fuel Spill Site, Holloman Air Force Base, New Mexico* (Bhate, 2011). A copy of the NMED approval letter of the referenced Work Plan is provided within the *Final 2012 Annual Performance Monitoring Progress Report, Building 1001 Fuel Spill Site, Holloman Air Force Base, New Mexico* (Bhate, 2013).

Since 2010 approximately 5.2 acres of accessible petroleum contaminated soil (PCS) located within the central portion of Site SS-61 north of Dezonia Road has been excavated and treated at the permitted FT-31 Land Farm. During late 2011/early 2012 two horizontal air injection wells were installed to remediate approximately two acres of inaccessible PCS located north of Dezonia Road using Aerobic In-situ Enhanced Bioremediation (AISEB) treatment technology. The remaining inaccessible PCS is located beneath existing facility buildings and utility corridors which are not viable for source area removal and treatment by excavation and land farming. The AISEB treatment process involves supplying nutrients (in this particular case, air) to stimulate the biological degradation of petroleum-based contaminants which are present below the water table by indigenous microorganisms. Therefore, the primary objective of performance monitoring is to determine the effectiveness of AISEB for treating the saturated PCS and groundwater located within two inaccessible areas at Site SS-61. A detailed discussion of the AISEB system installation and treatment zones is provided within the *Final 2012 Annual Performance Monitoring Progress Report, Building 1001 Fuel Spill Site, Holloman Air Force Base, New Mexico* (Bhate, 2013).

The objectives of AISEB performance monitoring is being accomplished by sampling 10 monitoring wells quarterly and eight soil borings on a semiannual basis for two years. The 10 monitoring wells and eight soil borings are strategically located within the two AISEB treatment zones to provide maximum coverage within area of inaccessible PCS. Details regarding project specific sampling and analysis requirements and results for the quarterly (groundwater) and semiannual (soil) sampling events are provided in Sections 4 through 6.

1.1 Report Organization

This Progress Report is organized into the following 8 sections:

- Section 1 – Introduction
- Section 2 – Site Background
- Section 3 – Applicable Screening Criteria
- Section 4 – Performance Monitoring Field Activities
- Section 5 – Quarterly Groundwater Sampling Events
- Section 6 – Semiannual Soil Sampling Events
- Section 7 – Summary and Discussion of Analytical Results
- Section 8 – References

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

2 SITE BACKGROUND

2.1 HAFB and SS-61 Description and Operational History

HAFB is located in south central New Mexico, in the northwest central part of Otero County, approximately 75 miles north-north-east of El Paso, Texas (Figure 2-1). HAFB has a population of 6,000, and supports approximately 21,000 active-duty Air Force, National Guard, Air Force Reserve, retirees, civilians, and their family members. HAFB occupies about 60,000 acres in the northeast quarter of Section 1, Township 17 South, Range 8 East. The White Sands Missile Range testing facilities occupy additional land extending northward from the Base. Private and public owned lands border the remainder of HAFB. The major highway servicing HAFB is Highway 70, which runs southwest from the town of Alamogordo and separates HAFB from publicly owned lands to the south. Alamogordo is located approximately 7 miles east of the base and has a population of approximately 31,000.

2.1.1 Holloman Air Force Base

HAFB was first established in 1942 as Alamogordo Army Air Field (AAF). From 1942 through 1945, Alamogordo AAF served as the training grounds for over 20 different flight groups, flying primarily B-17s, B-24s, and B-29s. After World War II, most operations had ceased at the base. In 1947, Air Material Command announced the air field would be its primary site for the testing and development of un-manned aircraft, guided missiles, and other research programs. On January 13, 1948, the Alamogordo installation was renamed Holloman Air Force Base, in honor of the late Col. George V. Holloman; a pioneer in guided missile research. In 1968, the 49th Tactical Fighter Wing arrived at HAFB and has remained since. HAFB has also served as the German Air Force's Tactical Training Center since 1996.

2.1.2 SS-61 Site Description

Site SS-61 is located in an industrial area in the central part of HAFB (Figure 2-2). The site is located north of two hangars, Buildings 1079 and 1080, and is divided by Dezonia Road that runs east-west through the site (Figure 2-3). The northern section of the site consists of a concrete pad, located southeast of Building 1001 and immediately west of Building 1072, which may have been used for dispensing fuel. Northeast of the concrete pad were two historical aviation gasoline (AVGAS) above ground storage tanks (ASTs) which have been removed. The ground surface rises approximately 10 feet (ft) toward the former AST area. A partial outline of the containment berm in the area of the former northern AST is still visible. The circular berm is approximately 180 ft in diameter, rising approximately 8 ft above grade, and approximately 10 ft wide at the base. No remnant of a berm is visible for the former southern AST.

A 6-inch diameter steel pipe emerging from the ground at a 45º angle, oriented north to south is located within the former southern AST area. The steel pipe has been capped with a steel plate and eight 1-inch bolts. The underground piping can be traced to a T-junction located 600 ft south of the southern AST area and just north of Building 1072. A geophysical survey

conducted during the 1999 Phase I Remedial Investigation (RI), traced one branch of the main north-south pipeline west from the T-junction to an area directly north of the concrete pad to two concrete vaults (Foster Wheeler Environmental Corporation [FWENC], 1999). Based on the results of the geophysical survey it is believed that the pipeline was buried 4 to 6 ft below ground surface. At the pipeline T-junction the pipeline traveled to the west and supplied AVGAS to three previously removed 20,000 gallon underground storage tanks which were connected to two concrete vaults and a former refueling/pumping station (Figure 2-3). The other piping branch ran 600 ft to the south and connected with a valve vault located southeast of the hangar area (Building 1079).

The southern portion of SS-61, south of Dezonia Road, consists of one hangar; Building 1079 (Figure 2-3). South of the hangar is the tarmac. Building 1079 was constructed in the 1940s. A geophysical survey conducted during the Phase II RI (FWENC, 1999), traced the main north-south trending pipeline from the T-junction (described above) to the south underneath Building 1087 to the pipeline terminus [valve vault] near Building 1071.

Site SS-61 includes two PCS source areas which are located north and south of Dezonia Road near Buildings 1071, 1072, 1001, and the Ramp Area (Building 1079). The releases consist of AVGAS used to supply a unit of post World War II piston powered aircraft which were temporarily stationed at HAFB. The AVGAS ASTs and piping system operated approximately between 1946 and the 1950s; which predates the installation of the high pressure water lines and water tower located west of the site. Leaks from this water supply system have resulted in a raised water table which submerged the preceding hydrocarbon release.

2.2 Site Chronology

The chronology of previous investigations and remedial actions conducted at SS-61 is outlined below.

- 1996 - Phase I Resource Conservation and Recovery Act (RCRA) Facility Investigation, Site AOC-1001 (FWENC and Groundwater Technology, Inc. [GTI])
- 1997 - Phase II RCRA Facility Investigation, Site AOC-1001 (FWENC and GTI)
- 1999 - Phase I Remedial Investigation for SS-61 (FWENC)
- 2000 - Phase II Remedial Investigation for SS-61 (FWENC)
- 2004 - Monitored Natural Attenuation for SS-61 (Bhate)
- 2007 – SS-61 Soil Remediation Voluntary Corrective Measures (Bhate)
- 2008 - SS-61 Soil Remediation Voluntary Corrective Measures Addendum (North Wind and Bhate)
- 2010 to present – SS-61 PCS excavation/treatment and Supplemental Voluntary Corrective Measures (Bhate)

Descriptions of these previous investigations and remedial actions are discussed in the *Supplemental Voluntary Corrective Measures Work Plan, SS-61 Building 1001 Fuel Site, Holloman Air Force Base, New Mexico* (Bhate, 2011).

3 APPLICABLE SCREENING CRITERIA

The analytical data collected during the 2013 Annual Performance Monitoring at Site SS-61 (January – October 2013) 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). Performance monitoring is being conducted to determine the effectiveness of remediating inaccessible PCS utilizing Aerobic In-Situ Enhanced Bioremediation. The soil and groundwater data collected during the SS-61 Performance Monitoring sampling events consists of a direct comparison to all applicable action levels for the analytes and media of concern.

The following sections present regulatory screening criteria used to evaluate the soil and groundwater analytical data for the SS-61 quarterly and semiannual sampling events.

3.1 Soil

3.1.1 VOCs and SVOCs

The risk based action levels for unrestricted residential land use provided in Table A-1 (NMED Soil Screening Levels*)* of NMED's *Risk Assessment Guidance for Investigations and Remediation* (NMED, 2012) will be used as the primary action levels for volatile Organic Compounds (VOCs), and semi-volatile organic compounds (SVOCs). As per the HAFB Permit, Appendix 4-F, Section V.1 (NMED, 2004) if a NMED soil screening level (SSL) has not been established for a hazardous constituent (e.g. 2-methylnapthalene) that constituent was compared to the United States Environmental Protection Agency (USEPA) Region 6 Human Health Medium Specific Screening Level (HHMSSL). However, under an Interagency Agreement as an update of the 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, 2013).

3.1.2 Total Petroleum Hydrocarbons

The action levels for total petroleum hydrocarbons (TPH) are established in Table 6-3 (TPH Screening Guidelines – Vapor Migration and Inhalation of Groundwater) of NMED's *Risk Assessment Guidance for Investigations and Remediation* (NMED, 2012). The TPH screening guideline (residential direct exposure), for kerosene and jet fuel (1,000 milligrams per kilogram [mg/kg]) (Table 6-3, NMED, 2012) was used as the action level for TPH concentrations (combined gasoline range organics [GRO], diesel range organics [DRO], and oil range organics [ORO]).

3.2 Groundwater

3.2.1 VOCs and SVOCs

As per Appendix 4-F (NMED, 2004), there are two applicable action levels for VOCs, and SVOCs detected in 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* (USEPA, 2009) Maximum Contaminant Levels (MCLs). If both the NMWQCC groundwater standard and a USEPA MCL have been established for an individual constituent, the lower of the two values was used as the action level for comparison.

3.2.2 Total Petroleum Hydrocarbons

The action levels for TPH are established in Table 6-3 (TPH Screening Guidelines – Vapor Migration and Inhalation of Groundwater) of NMED's *Risk Assessment Guidance for Investigations and Remediation* (NMED, 2012). The NMED TPH screening guideline for kerosene and jet fuel (18.5 milligrams per liter [mg/L]) is the action level compared to total TPH concentrations (GRO, DRO, and ORO) detected in groundwater.

3.2.3 Total Dissolved Solids

There are also two applicable standards for total dissolved solids (TDS), the NMWQCC groundwater standards for contaminants (NMAC 20.6.2.3103) and the USEPA's *National Primary Drinking Water Regulations* Secondary MCLs (USEPA, 2009). The lower of the two standards (500 mg/L) was used as the action level for TDS.

3.2.4 Monitored Natural Attenuation Parameters

Several monitored natural attenuation (MNA) analyses have been compared to applicable groundwater standards. Detections of nitrate, sulfate and manganese were compared to the NMWQCC groundwater cleanup levels for contaminants (NMAC 20.6.2.3103) and the USEPA National Primary and Secondary Drinking Water Regulations MCLs (USEPA, 2009). The lower of the two standards was used as action levels for nitrate, sulfate and manganese. Unfiltered (total) manganese was compared to the USEPA MCLs (USEPA, 2009) and filtered (dissolved manganese) was compared to the NMWQCC groundwater standards (NMAC 20.6.2.3103). Unfiltered (total) manganese was also compared to the NMED Approved Background Levels for Unfiltered (Total) Constituents in Groundwater (Table 2, NMED 2011) and filtered (dissolved) manganese was also compared to the NMED Approved Background Levels for Filtered (Dissolved) Constituents in Groundwater (Table 3, NMED 2011).

4 PERFORMANCE MONITORING FIELD ACTIVITIES

This section presents a summary of the Performance Monitoring field activities performed by Bhate in 2013 which include the following soil and groundwater sampling events: third quarter groundwater (January 2013), fourth quarter groundwater (April 2013), fifth quarter groundwater (July 2013), sixth quarter groundwater (October 2013), second semiannual soil (April 2013), and third semiannual soil (October 2013). A detailed discussion of 2012 Performance Monitoring field activities performed at SS-61 is provided in the *Final 2012 Annual Performance Monitoring Progress Report, Building 1001 Fuel Spill Site, Holloman Air Force Base, New Mexico* (Bhate, 2013).

The primary objective of the SS-61 performance monitoring program is to determine the effectiveness of the AISEB remediation system for treating saturated PCS and groundwater located within the inaccessible areas at Site SS-61 (i.e. Treatment Zones A and B). To achieve this objective, Bhate conducted four rounds of quarterly groundwater sampling and two semiannual soil sampling events at locations strategically placed within Treatment Zones A (air injection well SS61-IJ01) and B (air injection well SS61-IJ02) in 2013. The locations of the two horizontal injection wells (SS61-IJ01 and SS61-IJ02) along with corresponding treatment zones (A and B) are shown on Figure 4-1. The following performance monitoring field activities were conducted in 2013:

<u>Third Quarter Groundwater Sampling Event (January 2013)</u>

- Collected a round of water levels from 25 new and existing monitoring wells for creating the January 2013 potentiometric surface map.
- Collected groundwater samples from 10 monitoring wells (SS61-MW21 and SS61-MW23 through SS61-MW31). Each groundwater sample was analyzed for VOCs, SVOCs, TPH, TDS, and MNA parameters.

<u>Fourth Quarter Groundwater Sampling Event (April 2013)</u>

- Collected a round of water levels from 25 new and existing monitoring wells for creating the April 2013 potentiometric surface map.
- Collected groundwater samples from 10 monitoring wells (SS61-MW21 and SS61-MW23 through SS61-MW31). Each groundwater sample was analyzed for VOCs, SVOCs, TPH, TDS, and MNA parameters.

<u>Fifth Quarter Groundwater Sampling Event (July 2013)</u>

- Collected a round of water levels from 25 new and existing monitoring wells for creating the July 2013 potentiometric surface map.

- Collected groundwater samples from 10 monitoring wells (SS61-MW21 and SS61-MW23 through SS61-MW31). Each groundwater sample was analyzed for VOCs, SVOCs, TPH, TDS, and MNA parameters.

Sixth Quarter Groundwater Sampling Event (October 2013)

- Collected a round of water levels from 22 new and existing monitoring wells for creating the October 2013 potentiometric surface map.
- Collected groundwater samples from 10 monitoring wells (SS61-MW21 and SS61-MW23 through SS61-MW31). Each groundwater sample was analyzed for VOCs, SVOCs, TPH, TDS, and MNA parameters.

Second Semiannual Soil Sampling Event (April 2013)

- Advanced and sampled eight boreholes (SS61-SB68B through SS61-SB74B and SS61-SB76B) located within Treatment Zones A and B. One borehole was drilled adjacent to each of the original baseline soil borings. Soil samples were collected at the same interval as the baseline sample and were analyzed for VOCs, SVOCs, and TPH.

Third Semiannual Soil Sampling Event (October 2013)

- Advanced and sampled eight boreholes (SS61-SB68C through SS61-SB74C and SS61-SB76C) located within Treatment Zones A and B. One borehole was drilled adjacent to each of the original baseline soil borings. Soil samples were collected at the same interval as the baseline sample and were analyzed for VOCs, SVOCs, and TPH.

The locations of horizontal air injection wells (SS61-IJ01 and SS61-IJ02), Treatment Zones A and B, baseline performance monitoring soil borings (SS61-SB68 through SS61-SB74 and SS61-SB76), and monitoring wells (SS61-MW21 and SS61-MW23 through SS61-MW31) are shown on Figure 4-2. Soil boring logs and monitoring well construction diagrams for the wells installed during 2012 Performance Monitoring field activities are provided in the *Final 2012 Annual Performance Monitoring Progress Report, Building 1001 Fuel Spill Site, Holloman Air Force Base, New Mexico* (Bhate, 2013).

Prior to soil boring drilling activities, a Base Dig Permit (Air Force Form [AF Fm] 103) with a utility clearance, was submitted and approved by the proper HAFB offices. All completed field and waste handling activities at SS-61 were performed in accordance with the *Supplemental Voluntary Corrective Measures Work Plan, SS-61 Building 1001 Fuel Spill Site, Holloman Air Force Base, New Mexico* (Bhate, 2011).

4.1 Soil Borings and Subsurface Soil Sampling

During the second semiannual sampling event (April 2013) eight soil borings (SS61-SB68B through SS61-SB74B and SS61-SB76B) were drilled immediately adjacent to the original baseline soil borings and soil samples were collected from the same interval as the baseline sample. During the third semiannual sampling event (October 2013) eight soil borings (SS61-

SB68C through SS61-SB74C and SS61-SB76C) were drilled immediately adjacent to the original baseline soil borings and soil samples were collected from the same interval as the baseline sample. Tables 4-1 and 4-2 summarize soil boring locations, northing and easting coordinates, sample intervals and types of chemical analyses performed by the offsite laboratory for the second and third semiannual soil sampling events.

The soil borings were advanced using a Central Mining Equipment (CME) hollow stem auger drill rig, equipped with 8.25-inch augers, five foot continuous core barrels, and the associated tooling. These soil borings were sampled continuously to depths of 30 ft below ground surface (bgs). Soils were visually classified in the field by a geologist according to the Unified Soil Classification System. Soils were screened using a MiniRAE® 2000 photoionization detector (PID), with soil-headspace screening techniques to aid in selecting samples for laboratory analysis. A total of eight soil samples (plus quality control [QC] duplicate samples) were collected and analyzed for VOCs, SVOCs, and TPH during each the second and third semiannual soil sampling events. The soil samples were placed in the appropriate containers, packed on ice at 4 degrees Celsius (ºC), and delivered under chain-of-custody to Accutest Laboratories in Orlando, Florida. Soil boring logs for 2013 performance monitoring drilling activities are included in Appendix A.

4.2 Groundwater Elevations

To determine the groundwater flow direction at Site SS-61 during each 2013 sampling event, groundwater elevations were measured at the nine new wells (SS61-MW23 through SS61-MW31) and 16 existing wells (SS61-MW02, SS61-MW04 to SS61-MW10, SS61-MW12, SS61-MW13, SS61-MW15, SS61-MW16, SS61-MW21, SS61-MW22, SS61-TMW84 and MW-29-04). It should be noted that monitoring wells SS61-MW18 and SS61-MW19 were abandoned during excavation activity, and therefore could not be gauged following the baseline sampling event. Additionally, monitoring wells SS61-MW10, SS61-MW15, and SS61-TMW84 were abandoned in September 2013 during excavation activity, and therefore could not be gauged during the sixth quarterly event, performed in October 2013. Table 4-3 presents the groundwater elevation data collected during the 2013 quarterly groundwater sampling events. Potentiometric surface maps of SS-61 were developed using the data collected on January 21, 2013 (third quarter), April 10, 2013 (fourth quarter), July 16, 2013 (fifth quarter) and October 21, 2013 (sixth quarter) (Figures 4-3 through 4-6, respectively).

The groundwater flow pattern observed during the third quarter through sixth quarter groundwater sampling events is conical, centered around the SS-61 PCS excavation pit. In order to excavate the PCS layer located below the water table (between 20 to 33 ft bgs) a dewatering system (comprised of two horizontal and 10 vertical groundwater extraction wells) was installed in late 2011. The short term net effect of dewatering has lowered the groundwater table in the vicinity of the SS-61 excavation pit by 10 to 12 ft which has resulted in a cone of depression centered on the excavation. Once the SS-61 PCS excavation is completed and dewatering system is taken off-line, the groundwater at SS-61 should return to the pre-dewatering west-northwest flow direction.

4.3 Groundwater Sampling

The 10 performance monitoring wells located within Treatment Zones A and B (SS61-MW21 and SS61-MW23 through SS61-MW31) were sampled for VOCs, SVOCs, TPH, and MNA parameters during January 2013 (third quarter), April 2013 (fourth quarter), July 2013 (fifth quarter) and October 2013 (sixth quarter) sampling events and are illustrated on (Figure 4-2).

Monitoring well purging and sampling was completed with low flow techniques utilizing a Monsoon 12-volt stainless steel submersible pump, disposable polyethylene tubing, 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. Due to the close proximity of select monitoring wells to the horizontal air injection wells present within Treatment Zones A and B elevated dissolved oxygen and turbidity have been observed during purging activities. Upon reaching stable purging parameters, VOC samples were collected using disposable Teflon bailers followed by collecting the remaining samples using the submersible pump at low flow rates. Samples collected for dissolved manganese were also field filtered with a 0.45 micron filter. Each well was pumped at an average rate of less than 1 liter per minute. Monitoring Well Sample Collection Forms for each quarterly sampling event are included as Appendix B.

4.4 Laboratory Analytical Methods and Data Validation

This section provides a summary of the laboratory analytical methods and a data validation summary.

4.4.1 Laboratory Analysis

The chemical analysis of soil and groundwater samples collected during the performance monitoring at SS-61 followed USEPA SW-846 protocols. The soil and groundwater samples collected for performance monitoring were analyzed as follows:

- VOCs by USEPA Method 8260B
- SVOCs by USEPA Method 8270D
- TPH (GRO, DRO, ORO) by modified USEPA Method 8015C

The groundwater samples collected from the monitoring wells were also analyzed for the following MNA parameters:

- Hydrogen sulfide by USEPA Standard Method (SM) 18 4500/USEPA 376.1
- Ferric iron by SM18 3500 FE-D
- Ferrous iron by SM18 3500 FE-D
- Iron by USEPA Method 200.7/6010C
- Manganese by USEPA Method 200.7/6010C

- Ammonia by USEPA Method 350.1
- Nitrate by USEPA Method 300/9056A
- Total Kjeldahl Nitrogen (TKN) by USEPA Method 351.2
- Biological Oxygen Demand (BOD) by SM19 5210C
- Chemical Oxygen Demand (COD) by SM19 5220C
- Sulfate by USEPA Method 300/9056A
- TDS by USEPA SM19 2540C

A total of 18 soil samples including 2 field duplicate samples, and 44 groundwater samples including 4 field duplicate samples were collected during the 2013 third quarter groundwater, fourth quarter groundwater, fifth quarter groundwater, sixth quarter groundwater, second semiannual soil and third semiannual soil sampling events. All samples were placed on ice and shipped under strict chain-of-custody to Accutest Laboratories in Orlando, Florida for analysis.

4.4.2 Data Validation Summary

The analysis of soil and groundwater samples collected during 2013 performance monitoring sampling events followed the proposed methodologies presented in the *Final Supplemental Voluntary Corrective Measures Work Plan Site SS-61 Building 1001 Fuel Spill Site, Holloman Air Force Base, New Mexico* (Bhate, 2011).

Field Quality Assurance (QA)/QC samples, including trip blanks, and duplicates were collected to document field and laboratory QA/QC. The complete analytical data results presented in sample delivery groups are provided in Appendix C.

All of the laboratory data generated as part of SS-61 performance monitoring sampling was validated by a Senior chemist. Data qualifiers that were assigned as a result of data validation based on the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (USEPA, 2008) and in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, 2010) are included in the Data Validation Reports for each sample delivery group. The Data Validation Reports for each sample delivery group are provided in Appendix D. Accutest Laboratories, Orlando, Florida performed the analysis of all 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 validation reports (Appendix D).

4.5 Equipment Decontamination

All reusable groundwater sampling equipment (water level meter and water quality meter) were decontaminated prior to use at each monitoring well, in accordance with HAFB Standard Operating Procedure (SOP)-2 provided in the Basewide Quality Assurance Project Plan (QAPP) (Bhate, 2003).

4.6 Investigative Derived Waste Management

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

All soil cuttings (generated from soil borings) were transported to the permitted FT-31 Land Farm for treatment. Decontamination and purge waters from groundwater sampling were locally contained in 55 gallon steel drums and transported to an 18,000 gallon storage (weir) tank located at Site SS-61. The 18,000 gallon storage tank is maintained by Bhate, pending laboratory analysis, until disposal through the HAFB Wastewater Treatment Plant is permitted.

4.7 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 *Final Supplemental Voluntary Corrective Measures Work Plan Site SS-61 Building 1001 Fuel Spill Site Holloman Air Force Base, New Mexico* (Bhate, 2011).

5 QUARTERLY GROUNDWATER SAMPLING EVENTS

In 2013, four quarters of performance monitoring groundwater sampling were conducted at Site SS-61. The primary objective of quarterly groundwater monitoring is to quantify the effectiveness of the AISEB treatment system. Ten monitoring wells (SS61-MW21 and SS61-MW23 through SS61-MW31) located within Treatment Zones A and B were sampled during the each quarterly event. Groundwater samples were submitted to Accutest Laboratories for VOC, SVOC, TPH (GRO/DRO/ORO), TDS, and MNA (hydrogen sulfide, ferric iron, ferrous iron, iron [total], manganese [total and dissolved], ammonia, nitrate, TKN, BOD, COD, and sulfate) analysis.

Summaries of the quarterly groundwater analytical results (detections only) are provided in Table 5-1 (Quarter 3, January 2013), Table 5-2 (Quarter 4, April 2013), Table 5-3 (Quarter 5, July 2013) and Table 5-4 (Quarter 6, October 2013). Complete laboratory analytical packages (including chain of custodies) and data validation reports, are provided in Appendix C and Appendix D, respectively. Figures 5-1 and 5-2 present the NMWQCC and USEPA MCL groundwater exceedences from Quarter 3 (January 2013), Figures 5-3 and 5-4 depict the groundwater exceedences from Quarter 4 (April 2013), Figures 5-5 and 5-6 depict the groundwater exceedences from Quarter 5 (July 2013), and Figures 5-7 and 5-8 depict the groundwater exceedences from Quarter 6 (October 2013). The following sections provide a summary of the third through sixth quarter groundwater sampling results for Treatment Zones A and B.

5.1 Quarter 3 – Groundwater Analytical Results (January 2013)

During the third quarterly sampling event (January 2013) 11 groundwater samples (including one duplicate) were collected from 10 performance monitoring wells located within Treatment Zones A (SS61-MW27 through –MW31) and B (SS61-MW21 and –MW23 through –MW26). The 11 groundwater samples collected during the third quarterly sampling event were analyzed for VOCs, SVOCs, TPH, TDS, and MNA parameters. The third quarter analytical results (detections and estimated values only) are presented in Table 5-1 and the monitoring well locations with results above action levels are shown on Figures 5-1 and 5-2. The following sections present a summary of the third quarter groundwater sampling results collected within Treatment Zones A and B approximately nine months after the SS-61 AISEB treatment system went into operation.

5.1.1 Volatile Organic Compounds

Twenty-two VOCs were detected above the method detection limit (MDL) in groundwater samples collected from the 10 wells sampled during the third quarterly sampling event (Table 5-1). Of the 20 VOCs detected above the MDL, benzene, 1,2-dichloroethane (1,2-DCA), and p-dichlorobenzene were detected above the NMWQCC groundwater standards (NMAC 20.6.2.3103) and/or the USEPA MCLs (USEPA, 2009). Benzene and 1,2-DCA are typical

constituents of AVGAS fuel. Five of the 10 monitoring wells had concentrations of one to three VOCs detected above their applicable groundwater action levels (Figure 5-1).

Benzene was detected in four Treatment Zone B wells above the USEPA MCL (5 µg/L) with concentrations ranging from 61 micrograms per liter (µg/L) (SS61-MW24) to 432 µg/L (SS61-MW21). P-dichlorobenzene (also known as 1,4-dichlorobenzene) was detected in one Treatment Zone B well above the USEPA MCL (75 µg/L) at a concentration of 123 µg/L (SS61-MW25). 1,2-DCA was detected in one Treatment Zone A well above the USEPA MCL (5 µg/L) at a concentration of 31.4 µg/L (SS61-MW30). The remaining 19 VOCs were detected at concentrations below their applicable groundwater action levels.

In comparison to the second quarter sampling event, VOC concentrations during the third quarter generally decreased and the number of wells with VOCs detections above applicable action levels remained the same. The p-dichlorobenzene (also known as 1,4-dichlorobenzene) concentration observed within SS61-MW25 during this sampling event was the first exceedence of this particular compound at Site SS-61 since performance monitoring began in 2012.

5.1.2 Semi-Volatile Organic Compounds

Seven SVOCs were detected above the MDL during the third quarterly sampling event (Table 5-1). There were no SVOC detections above an applicable NMWQCC or USEPA MCL groundwater action level during this sampling event. In comparison with the second quarter sampling event, SVOC concentrations during the third quarter generally decreased and the number of wells with SVOC detections above applicable action levels decreased by two wells.

5.1.3 Total Petroleum Hydrocarbons

TPH fractions GRO ($C_6 – C_{10}$), DRO ($C_{10} – C_{22}$), and/or ORO ($C_{22} – C_{36}$) were detected above the MDLs in the groundwater samples collected from nine of the 10 performance monitoring wells sampled during the third quarterly event (Table 5-1). However, TPH GRO, DRO and/or ORO (singular or combined) were not detected above the NMED TPH Screening Guideline (Concentration in Groundwater) for kerosene and jet fuel (18.5 mg/L [NMED 2012, Table 6-3]) in any of the groundwater samples collected during the third quarterly sampling event. The maximum combined concentration of combined TPH-GRO/DRO/ORO was detected in groundwater sample collected from SS61-MW24 at 8.47 mg/L. A continuing decreasing trend of combined TPH-GRO/DRO/ORO concentrations within Treatment Zones A and B was observed during the third quarterly sampling event.

5.1.4 Total Dissolved Solids

TDS concentrations (Table 5-1) ranged from 5,420 mg/L to 18,200 mg/L (Treatment Zone A) and from 4,130 mg/L to 5,420 mg/L (Treatment Zone B) and exceeded the NMWQCC standard (1,000 mg/L) and the USEPA Secondary MCL (500 mg/L) in each of the 10 wells sampled (Figure 5-1). The inconsistency of TDS concentrations between Treatment Zones A (three wells > 10,000 mg/L) and B (all wells < than 10,000 mg/L) implies that the lower TDS concentrations

detected within Treatment Zone B (< 10,000 mg/L) are due to the dilution of the natural groundwater from the leaking water line located along the north side Dezonia Road.

As shown in Figure 4-3, the seven wells with TDS concentrations < 10,000 mg/L (SS61-MW21, –MW23, –MW24, –MW25, –MW26, –MW27 and –MW28) are located in the vicinity of the Dezonia Road water line. However, the three wells (SS61-MW29 through –MW31) located within the northern portion of Treatment Zone B (further away from Dezonia Road) have an average TDS concentration of 15,267 mg/L. The TDS concentrations less than 10,000 mg/L are most likely anthropogenic due leaks in Dezonia Road water line, therefore the natural TDS concentration at SS-61 is > 10,000 mg/L. As a result, this aquifer is classified by USEPA as a Class III B aquifer (TDS > 10,000 mg/L) which is designated as unfit for human consumption (USEPA, 1986). In general, TDS concentrations remained unchanged between the second and third quarterly sampling events.

5.1.5 Monitored Natural Attenuation Parameters

Laboratory natural attenuation parameters were also analyzed to determine the effectiveness of the AISEB system (Treatment Zones A and B). Laboratory analysis consisted of hydrogen sulfide, ferric iron, ferrous iron, iron (total), manganese (total and dissolved), ammonia, nitrate, TKN, BOD, COD, and sulfate. The results for the MNA analyses are included in Table 5-1 and MNA results above applicable action levels (e.g., total iron, total and dissolved manganese, and sulfate) are shown on Figure 5-2. Presented below is a brief summary of the MNA groundwater data collected during the third quarterly sampling event.

- Hydrogen sulfide was detected in five samples with concentrations ranging from 0.64 J [J is a laboratory data qualifier denoting an estimated concentration] to 15.9 mg/L.
- Ferrous iron (Fe^{2+}) was detected in nine samples with concentrations ranging from 0.048 J to 2.6 mg/L.
- Ferric iron (Fe^{3+}) was detected in nine samples with concentrations ranging from 0.073 J to 1.0 mg/L.
- Total iron was detected in 11 samples with concentrations ranging from 57.8 J to 3,630 mg/L and exceeded the USEPA MCL (300 µg/L) in eight samples.
- Total manganese was detected in 11 samples with concentrations ranging from 139 to 2,230 mg/L and exceeded the USEPA MCL (50 µg/L) in each sample.
- Dissolved manganese was detected in 11 samples with concentrations ranging from 251 to 2,260 mg/L and exceeded the NMWQCC standard (200 µg/L) and the USEPA MCL (50mg/L) in each sample.
- Ammonia was detected in nine samples with concentrations ranging from 0.037 J to 0.092 J mg/L.
- Total Kjeldahl Nitrogen was detected in 11 samples with concentrations ranging from 0.46 J to 4.0 mg/L.

- Biological oxygen demand was detected in three samples with concentrations ranging from 16.7 to 18.9 mg/L.
- Chemical oxygen demand was detected in 10 samples with concentrations ranging from 12.4 to 380 mg/L.
- Nitrate was detected in one sample at a concentration of 2.3 J mg/L which does not exceed the USEPA MCL (10 mg/L) or NMWQCC standard (10 mg/L).
- Sulfate was detected in 11 samples with concentrations ranging from 2,910 to 5,860 mg/L. All detections of sulfate exceeded the USEPA MCL (250 mg/L) but were below the NMED approved background value (17,419 mg/L).

5.2 Quarter 4 – Groundwater Analytical Results (April 2013)

During the fourth quarterly sampling event (April 2013) 11 groundwater samples (including one duplicate) were collected from 10 performance monitoring wells located within Treatment Zones A (SS61-MW27 through –MW31) and B (SS61-MW21 and –MW23 through –MW26) (Figure 5-1). The 11 groundwater samples collected during the fourth quarterly sampling event were analyzed for VOCs, SVOCs, TPH (GRO, DRO and, ORO), TDS, and MNA parameters. The fourth quarter analytical results (detections and estimated values only) are presented in Table 5-2 and the monitoring well locations with results above action levels are shown on Figures 5-3 and 5-4. The following sections present a summary of the fourth quarterly groundwater sampling results collected within Treatment Zones A and B approximately twelve months after AISEB treatment system became operational.

5.2.1 Volatile Organic Compounds

Twenty three VOCs were detected above the MDL in groundwater samples collected from the 10 wells sampled during the SS-61 fourth quarterly sampling event (Table 5-2). Of the 23 VOCs detected above the MDL, only benzene and 1,2-DCA were detected above the NMWQCC groundwater standards (NMAC 20.6.2.3103) and/or the USEPA MCLs (USEPA, 2009). Benzene and 1,2-DCA are constituents of AVGAS fuel. Five of the 10 monitoring wells sampled had concentrations of either benzene or 1,2-DCA detected above applicable groundwater action levels (Figure 5-3).

Benzene was detected in four Treatment Zone B wells above the USEPA MCL (5 µg/L) with concentrations ranging from 19.1 µg/L (SS61-MW24) to 3,460 µg/L (SS61-MW25). 1,2-DCA was detected in one Treatment Zone A well (SS61-MW30) above the USEPA MCL (5 µg/L) at a concentration of 27.8 µg/L. The remaining 23 VOCs were detected at concentrations below their applicable groundwater standards.

In comparison to the third quarter sampling event, VOC concentrations during the fourth quarter generally decreased and the number of wells with VOC detections above applicable action levels remained the same. The benzene concentration observed within SS61-MW25 during the fourth quarter (3,460 µg/L) was the highest benzene detection in that particular well since the baseline sampling event in January 2012 (4,460 µg/L).

5.2.2 Semi-Volatile Organic Compounds

Eight SVOCs were detected above the MDL during the fourth quarterly sampling event (Table 5-2). However, phenol and 1,4-dichlorobenzene were the only SVOCs detected above an applicable NMWQCC or USEPA MCL groundwater action level. As shown on Figure 5-3, phenol was detected above the NMWQCC groundwater standard (5 µg/L) in one of the Treatment Zone B performance monitoring wells at a concentration of 5.5 µg/L (SS61-MW26). Also shown on Figure 5-3, 1,4-dichlorobenzene was detected above the USEPA MCL groundwater standard (75 µg/L) in one of the Treatment B performance monitoring wells at a concentration of 79.0 µg/L. In comparison with the third quarter sampling event, SVOC concentrations during the fourth quarter generally decreased although the number of wells with SVOC detections above applicable action levels increased by two wells.

5.2.3 Total Petroleum Hydrocarbons

TPH fractions GRO (C_6 – C_{10}), DRO (C_{10} – C_{22}), and/or ORO (C_{22} – C_{36}) were detected above the MDLs in the groundwater samples collected from each of the 10 performance monitoring wells sampled during the fourth quarterly event (Table 5-2). However, TPH-GRO, –DRO and/or –ORO (singular or combined) were not detected above the NMED TPH Screening Guideline (Concentration in Groundwater) for kerosene and jet fuel (18.5 mg/L [NMED 2012, Table 6-3]) in any of the groundwater samples collected during the fourth quarterly sampling event. The maximum combined concentration of combined TPH-GRO/DRO/ORO was detected in groundwater sample collected from SS61-MW25 at 10.75 mg/L. In general, a continuing decreasing trend of combined TPH-GRO/DRO/ORO concentrations within Treatment Zones A and B was observed during the fourth quarterly sampling event.

5.2.4 Total Dissolved Solids

TDS concentrations (Table 5-2) ranged from 5,490 mg/L to 17,300 mg/L (Treatment Zone A) and from 4,380 mg/L to 6,010 mg/L (Treatment Zone B) and exceeded the NMWQCC standard (1,000 mg/L) and the USEPA Secondary MCL (500 mg/L) in each of the 10 wells sampled (Figure 5-3). The large difference in TDS concentrations between Treatment Zones A (three wells > 10,000 mg/L) and B (all wells < than 10,000 mg/L) verifies that the lower TDS concentrations detected within Treatment Zone B (< 10,000 mg/L) are due to the dilution of the natural groundwater from a leaking water line which is located along the north side Dezonia Road.

As shown in Figure 4-4, the seven wells with TDS concentrations < 10,000 mg/L (SS61-MW21, –MW23, –MW24, –MW25, –MW26, –MW27 and –MW28) are each located near the Dezonia Road water line. However, the three wells (SS61-MW29 through –MW31) located within the northern portion of Treatment Zone B (further away from Dezonia Road) have an average TDS concentration of 15,733 mg/L (duplicate sample TDS concentration from SS61-MW30 used in this calculation, as it was higher than primary sample). The TDS concentrations less than 10,000 mg/L are most likely anthropogenic due to leaks in the Dezonia Road water line, therefore the

natural TDS concentration at SS-61 is > 10,000 mg/L. As a result, this aquifer is classified by USEPA as a Class III B aquifer (TDS > 10,000 mg/L) which is designated as unfit for human consumption (USEPA, 1986). In general, TDS concentrations remained unchanged between the third and fourth quarter sampling events.

5.2.5 Monitored Natural Attenuation Parameters

Laboratory natural attenuation parameters were also analyzed as part of the performance groundwater monitoring to determine the effectiveness of the AISEB system (Treatment Zones A and B). Laboratory analysis consisted of hydrogen sulfide, ferric iron, ferrous iron, iron (total), manganese (total and dissolved), ammonia, nitrate, TKN, BOD, COD, and sulfate. The results for the MNA analyses are included in Table 5-2 and MNA results above applicable action levels (total iron, total and dissolved manganese, and sulfate) are shown on Figure 5-4. Presented below is a brief summary of the MNA groundwater data collected during the fourth quarterly sampling event.

- Hydrogen sulfide was detected in three samples with concentrations ranging from 0.79 J to 15.0 mg/L.
- Ferrous iron (Fe^{2+}) was detected in nine samples with concentrations ranging from 0.11 to 0.97 mg/L.
- Ferric iron (Fe^{3+}) was detected in eleven samples with concentrations ranging from 0.13 J to 2.3 mg/L.
- Total iron was detected in 11 samples with concentrations ranging from 189 J to 2,670 mg/L and exceeded the USEPA MCL (300 µg/L) in ten samples.
- Total manganese was detected in 11 samples with concentrations ranging from 69.4 to 2,000 mg/L and exceeded the USEPA MCL (50 µg/L) in each sample.
- Dissolved manganese was detected in 11 samples with concentrations ranging from 81.7 to 2,090 mg/L and exceeded the NMWQCC standard (200 µg/L) and the USEPA MCL in each sample.
- Ammonia was detected in two samples with concentrations ranging from 0.045 J to 0.094 J mg/L.
- Total Kjeldahl Nitrogen was detected in ten samples with concentrations ranging from 2.6 to 3.8 mg/L.
- Biological oxygen demand was detected in six samples with concentrations ranging from 2.2 J to 16.6 mg/L.
- Chemical oxygen demand was detected in 11 samples with concentrations ranging from 9.8 J to 213 mg/L.
- Nitrate was detected in two samples with concentrations ranging from 7.0 J to 7.2 J mg/L and was below the USEPA MCL (10 mg/L) and NMWQCC standard (10 mg/L) in both samples.

- Sulfate was detected in 11 samples with concentrations ranging from 2,980 to 6,150 mg/L. All detections of sulfate exceeded the USEPA MCL (250 mg/L) but were below the NMED approved background level (17,419 mg/L).

5.3 Quarter 5 – Groundwater Analytical Results (July 2013)

During the fifth quarterly sampling event (July 2013) 11 groundwater samples (including one duplicate) were collected from 10 performance monitoring wells located within Treatment Zones A (SS61-MW27 through –MW31) and B (SS61-MW21 and –MW23 through –MW26) (Figure 5-1). The 11 groundwater samples collected during the fifth quarterly sampling event were analyzed for VOCs, SVOCs, TPH (GRO, DRO, and ORO), TDS, and MNA parameters. The fifth quarter analytical results (detections and estimated values only) are presented in Table 5-3 and the monitoring well locations with results above action levels are shown on Figures 5-5 and 5-6. The following sections present a summary of the fifth quarterly groundwater sampling results collected within Treatment Zones A and B approximately fifteen months after AISEB treatment system became operational.

5.3.1 Volatile Organic Compounds

Twenty VOCs were detected above the MDL in groundwater samples collected from the 10 wells sampled during the SS-61 fifth quarterly sampling event (Table 5-3). Of the 20 VOCs detected above the MDL, benzene, 1,2-DCA, p-dichlorobenzene (also known as 1,4-dichlorobenzene), and methylene chloride were detected above the NMWQCC groundwater standards (NMAC 20.6.2.3103) and/or the USEPA MCLs (USEPA, 2009). Benzene and 1,2-DCA are constituents of AVGAS fuel. Methylene chloride is a common laboratory contaminant. Four of the 10 monitoring wells sampled had concentrations of either benzene or 1,2-DCA detected above applicable groundwater action levels (Figure 5-5).

Benzene was detected in three Treatment Zone B wells above the USEPA MCL (5 µg/L) with concentrations ranging from 113 µg/L (SS61-MW21) to 2,930 µg/L (SS61-MW25). P-dichlorobenzene (also known as 1,4-dichlorobenzene) was detected in one Treatment Zone B well above the USEPA MCL (75 µg/L) at a concentration of 136 µg/L (SS61-MW25). 1,2-DCA was detected in one Treatment Zone A well (SS61-MW30) above the USEPA MCL (5 µg/L) at a concentration of 28.9 µg/L. Methylene chloride was detected in two Treatment Zone B wells above the USEPA MCL (5 µg/L) with concentrations ranging from 10.8 J µg/L (SS61-MW21) to 181 J µg/L (SS61-MW25). The remaining 16 VOCs were detected at concentrations below their applicable groundwater standards.

In comparison to the fourth quarter sampling event, VOC concentrations during the fifth quarter generally decreased along with the number of wells containing VOC detections above applicable action levels.

5.3.2 Semi-Volatile Organic Compounds

Seven SVOCs were detected above the MDL during the fifth quarterly sampling event (Table 5-3). However, 1,4-dichlorobenzene (also known as p-dichlorobenzene) was the only SVOC

detected above an applicable NMWQCC or USEPA MCL groundwater action level. As shown on Figure 5-5, 1,4-dichlorobenzene was detected above the NMWQCC groundwater standard (75 µg/L) in one Treatment Zone B performance monitoring well at a concentration of 81.1 µg/L (SS61-MW25-A). The 1,4-dichlorobenzene concentration observed within SS61-MW25 during this quarterly sampling event (81.1 µg/L) was a slight increase from the previous quarter's concentration (79.0 µg/L).

5.3.3 Total Petroleum Hydrocarbons

TPH fractions GRO ($C_6 – C_{10}$), DRO ($C_{10} – C_{22}$), and/or ORO ($C_{22} – C_{36}$) were detected above the MDLs in the groundwater samples collected from 9 of the 10 performance monitoring wells sampled during the fifth quarterly event (Table 5-3). However, TPH-GRO, –DRO and/or –ORO (singular or combined) were not detected above the NMED TPH Screening Guideline (Concentration in Groundwater) for kerosene and jet fuel (18.5 mg/L [NMED 2012, Table 6-3]) in any of the groundwater samples collected during the fifth quarterly sampling event. The maximum combined concentration of TPH-GRO/DRO/ORO was detected in groundwater sample collected from SS61-MW31 at 12.727 mg/L. A continuing decreasing trend of combined TPH-GRO/DRO/ORO concentrations within Treatment Zones A and B was observed during the fifth quarterly sampling event.

5.3.4 Total Dissolved Solids

TDS concentrations (Table 5-3) ranged from 6,040 mg/L to 17,600 mg/L (Treatment Zone A) and from 4,300 mg/L to 6,360 mg/L (Treatment Zone B) and exceeded the NMWQCC standard (1,000 mg/L) and the USEPA Secondary MCL (500 mg/L) in each of the 10 wells sampled (Figure 5-5). The large difference in TDS concentrations between Treatment Zones A (three wells > 10,000 mg/L) and B (all wells < than 10,000 mg/L) verifies that the lower TDS concentrations detected within Treatment Zone B (< 10,000 mg/L) are due to the dilution of the natural groundwater from a leaking water line which is located along the north side Dezonia Road.

As shown in Figure 4-5, the seven wells with TDS concentrations < 10,000 mg/L (SS61-MW21, –MW23, –MW24, –MW25, –MW26, –MW27 and –MW28) are each located near the Dezonia Road water line. However, the three wells (SS61-MW29 through –MW31) located within the northern portion of Treatment Zone B (further away from Dezonia Road) have an average TDS concentration of 15,333 mg/L. The TDS concentrations less than 10,000 mg/L are most likely anthropogenic due to leaks in the Dezonia Road water line, therefore the natural TDS concentration at SS-61 is > 10,000 mg/L. As a result, this aquifer is classified by USEPA as a Class III B aquifer (TDS > 10,000 mg/L) which is designated as unfit for human consumption (USEPA, 1986). In general, TDS concentrations remained unchanged between the fourth and fifth quarterly sampling events.

5.3.5 Monitored Natural Attenuation Parameters

Laboratory natural attenuation parameters were also analyzed as part of the performance groundwater monitoring to determine the effectiveness of the AISEB system (Treatment Zones A and B). Laboratory analysis consisted of hydrogen sulfide, ferric iron, ferrous iron, iron (total), manganese (total and dissolved), ammonia, nitrate, TKN, BOD, COD, and sulfate. The results for the MNA analyses are included in Table 5-3 and MNA results above applicable action levels (total iron, total and dissolved manganese, and sulfate) are shown on Figure 5-6. Presented below is a brief summary of the MNA groundwater data collected during the fifth quarterly sampling event.

- Hydrogen sulfide was detected in four samples with concentrations ranging from 0.71 J to 6.0 mg/L.
- Ferrous iron (Fe^{2+}) was detected in eight samples with concentrations ranging from 0.034 J to 4.0 mg/L.
- Ferric iron (Fe^{3+}) was detected in eight samples with concentrations ranging from 0.21 J to 2.9 mg/L.
- Total iron was detected in nine samples with concentrations ranging from 33.5 J to 4,310 mg/L and exceeded the USEPA MCL (300 µg/L) in eight samples.
- Total manganese was detected in 11 samples with concentrations ranging from 109 to 2,450 mg/L and exceeded the USEPA MCL (50 µg/L) in each sample.
- Dissolved manganese was detected in 11 samples with concentrations ranging from 103 to 2,490 mg/L and exceeded the NMWQCC standard (200 µg/L) and the USEPA MCL in each sample.
- Ammonia was detected in three samples with concentrations ranging from 0.040 J to 0.042 J mg/L.
- Total Kjeldahl Nitrogen was detected in 11 samples with concentrations ranging from 0.98 to 3.0 mg/L.
- Biological oxygen demand was detected in six samples with concentrations ranging from 5.9 to 28.0 mg/L.
- Chemical oxygen demand was detected in 11 samples with concentrations ranging from 12.1 J to 396 mg/L.
- Nitrate was detected in two samples with concentrations ranging from 2.1 J to 2.5 mg/L and was below the USEPA MCL (10 mg/L) and NMWQCC standard (10 mg/L) in both samples.
- Sulfate was detected in 11 samples with concentrations ranging from 1,500 to 5,500 mg/L. All detections of sulfate exceeded the USEPA MCL (250 mg/L) but were below the NMED approved background level (17,419 mg/L).

5.4 Quarter 6 – Groundwater Analytical Results (October 2013)

During the sixth quarterly sampling event (October 2013) 11 groundwater samples (including one duplicate) were collected from 10 performance monitoring wells located within Treatment Zones A (SS61-MW27 through –MW31) and B (SS61-MW21 and –MW23 through –MW26) (Figure 5-1). The 11 groundwater samples collected during the second quarterly sampling event were also analyzed for VOCs, SVOCs, TPH (GRO, DRO and ORO), TDS, and MNA parameters. The sixth quarter analytical results (detections and estimated values only) are presented in Table 5-4 and the monitoring well locations with results above action levels are shown on Figures 5-7 and 5-8. The following sections present a summary of the sixth quarterly groundwater sampling results collected within Treatment Zones A and B approximately eighteen months after AISEB treatment system became operational.

5.4.1 Volatile Organic Compounds

Nineteen VOCs were detected above the MDL in groundwater samples collected from the 10 wells sampled during the SS-61 sixth quarterly sampling event (Table 5-4). Of the 19 VOCs detected above the MDL, benzene, 1,2-DCA, p-dichlorobenzene (also known as 1,4-dichlorobenzene), and methylene chloride were detected above the NMWQCC groundwater standards (NMAC 20.6.2.3103) and/or the USEPA MCLs (USEPA, 2009). Benzene and 1,2-DCA are constituents of AVGAS fuel. Methylene chloride is a common laboratory contaminant. Five of the 10 monitoring wells sampled had concentrations of either benzene or 1,2-DCA detected above applicable groundwater action levels (Figure 5-7).

Benzene was detected in four Treatment Zone B wells above the USEPA MCL (5 µg/L) with concentrations ranging from 6.1 µg/L (SS61-MW24) to 882 µg/L (SS61-MW25). P-dichlorobenzene (also known as 1,4-dichlorobenzene) was detected in one Treatment Zone B well above the USEPA MCL (75 µg/L) at a concentration of 113 µg/L (SS61-MW25). 1,2-DCA was detected in one Treatment Zone A well (SS61-MW30) above the USEPA MCL (5 µg/L) at a concentration of 7.9 J µg/L. Methylene chloride was detected in two Treatment Zone B wells above the USEPA MCL (5 µg/L) with concentrations ranging from 7.9 J µg/L (SS61-MW25) to 20.7 J µg/L (SS61-MW24). The remaining 15 VOCs were detected at concentrations below their applicable groundwater standards.

In comparison to the fifth quarterly sampling event, VOC concentrations during the sixth quarter generally decreased and the number of wells with VOC detections above applicable action levels remained the same.

5.4.2 Semi-Volatile Organic Compounds

Eleven SVOCs were detected above the MDL during the sixth quarterly sampling event (Table 5-4). There were no SVOC detections above an applicable NMWQCC or USEPA MCL groundwater action level during this sampling event. In comparison with the fifth quarter

sampling event, SVOC concentrations during the sixth quarter generally decreased and the number of wells with SVOC detections above applicable action levels decreased by one well.

5.4.3 Total Petroleum Hydrocarbons

TPH fractions GRO ($C_6 – C_{10}$), DRO ($C_{10} – C_{22}$), and/or ORO ($C_{22} – C_{36}$) were detected above the MDLs in the groundwater samples collected from each of the 10 performance monitoring wells sampled during the sixth quarterly event (Table 5-4). However, TPH-GRO, –DRO and/or –ORO (singular or combined) were not detected above the NMED TPH Screening Guideline (Concentration in Groundwater) for kerosene and jet fuel (18.5 mg/L [NMED 2012, Table 6-3]) in any of the groundwater samples collected during the sixth quarterly sampling event. The maximum combined concentration of TPH-GRO/DRO/ORO was detected in the duplicate groundwater sample collected from SS61-MW25 at 5.509 mg/L. A continuing decreasing trend of combined TPH-GRO/DRO/ORO concentrations within Treatment Zones A and B was observed during the sixth quarterly sampling event.

5.4.4 Total Dissolved Solids

TDS concentrations (Table 5-4) ranged from 5,840 mg/L to 16,000 mg/L (Treatment Zone A) and from 2,570 mg/L to 7,040 mg/L (Treatment Zone B) and exceeded the NMWQCC standard (1,000 mg/L) and the USEPA Secondary MCL (500 mg/L) in each of the 10 wells sampled (Figure 5-7). The large difference in TDS concentrations between Treatment Zones A (three wells > 10,000 mg/L) and B (all wells < than 10,000 mg/L) verifies that the lower TDS concentrations detected within Treatment Zone B (< 10,000 mg/L) are due to the dilution of the natural groundwater from a leaking water line which is located along the north side Dezonia Road.

As shown in Figure 4-6, the six wells with TDS concentrations < 10,000 mg/L (SS61-MW21, –MW23, –MW24, –MW25, –MW26, and -MW27) are each located near the Dezonia Road water line. However, the four wells (SS61-MW28 through –MW31) located within the northern portion of Treatment Zone B (further away from Dezonia Road) have an average TDS concentration of 13,625 mg/L. The TDS concentrations less than 10,000 mg/L are most likely anthropogenic due to leaks in the Dezonia Road water line, therefore the natural TDS concentration at SS-61 is > 10,000 mg/L. As a result, this aquifer is classified by USEPA as a Class III B aquifer (TDS > 10,000 mg/L) which is designated as unfit for human consumption (USEPA, 1986). In general, TDS concentrations remained unchanged between the fifth and sixth quarterly sampling events.

5.4.5 Monitored Natural Attenuation Parameters

Laboratory natural attenuation parameters were also analyzed as part of the performance groundwater monitoring to determine the effectiveness of the AISEB system (Treatment Zones A and B). Laboratory analysis consisted of hydrogen sulfide, ferric iron, ferrous iron, iron (total), manganese (total and dissolved), ammonia, nitrate, TKN, BOD, COD, and sulfate. The results for the MNA analyses are included in Table 5-4 and MNA results above applicable action levels

(total iron, total and dissolved manganese, and sulfate) are shown on Figure 5-8. Presented below is a brief summary of the MNA groundwater data collected during the sixth quarterly sampling event.

- Hydrogen sulfide was detected in seven samples with concentrations ranging from 0.87 J to 12.5 mg/L.
- Ferrous iron (Fe^{2+}) was detected in ten samples with concentrations ranging from 0.033 J to 3.8 mg/L.
- Ferric iron (Fe^{3+}) was detected in nine samples with concentrations ranging from 0.060 J to 0.94 mg/L.
- Total iron was detected in nine samples with concentrations ranging from 99.1 J to 4,740 mg/L and exceeded the USEPA MCL (300 µg/L) in six samples.
- Total manganese was detected in 11 samples with concentrations ranging from 56.5 to 2,530 mg/L and exceeded the USEPA MCL (50 µg/L) in each sample.
- Dissolved manganese was detected in 11 samples with concentrations ranging from 48.5 to 2,570 mg/L and exceeded the NMWQCC standard (200 µg/L) and the USEPA MCL in each sample with the exception of SS61-MW26.
- Ammonia was detected in three samples with concentrations ranging from 0.036 J to 0.077 J mg/L.
- Total Kjeldahl Nitrogen was detected in 11 samples with concentrations ranging from 0.78 to 1.5 mg/L.
- Biological oxygen demand was detected in five samples with concentrations ranging from 6.3 to 30.3 mg/L.
- Chemical oxygen demand was detected in ten samples with concentrations ranging from 7.4 J to 591 mg/L.
- Nitrate was detected in one sample at a concentration of 1.5 mg/L which is below the USEPA MCL (10 mg/L) and NMWQCC standard (10 mg/L).
- Sulfate was detected in 11 samples with concentrations ranging from 2,810 to 5,460 mg/L. All detections of sulfate exceeded the USEPA MCL (250 mg/L) but were below the NMED approved background level (17,419 mg/L).

6 SEMIANNUAL SOIL SAMPLING EVENTS

This section presents the soil analytical results from the second and third semiannual sampling events conducted at SS-61 in April and October 2013, respectively. The primary objective of semiannual soil sampling is to quantify the effectiveness of the AISEB treatment system (Treatment Zones A and B).

6.1 Second Semiannual Soil Analytical Results (April 2013)

A total of eight boreholes were advanced within Treatment Zones A (SS61-SB68B through SS61-SB71B) and B (SS61-SB72B through SS61-SB74B, and SS61-SB76B). The nine soil samples (including one duplicate) collected from these boreholes were analyzed for VOCs, SVOCs, and TPH (GRO, DRO, and ORO). During the second semiannual sampling event, the eight soil borings were drilled immediately adjacent to the original baseline soil borings (SS61-SB68 through SS61-SB74, and SS61-SB76) and subsequent semiannual soil borings. Soil samples were collected at the same interval as baseline and subsequent semiannual soil sampling events from each borehole.

The soil boring locations are shown on Figure 6-1 and the subsurface soil analytical results (detections and estimated values only) for the SS-61 second semiannual soil sampling event are summarized in Table 6-1. The drilling logs for the second semiannual sampling event are included in Appendix A. The following sections present a summary of the semiannual soil sampling results collected within Treatment Zones A and B in April 2013.

6.1.1 Volatile Organic Compounds

A total of 12 VOCs were detected above the MDL in the nine subsurface soil samples (including one duplicate) collected within Treatment Zones A and B (Table 6-1). One soil sample was collected per soil boring from the same interval as the baseline sample (interval with the highest baseline PID reading). One or more VOCs were detected above the MDL in each of the boreholes advanced.

Five boreholes (SS61-SB69B, –SB70B –SB72B, –SB73B and –SB74B) had the maximum concentrations of the 18 detected VOCs; however, all detected VOCs were below their applicable NMED SSLs (NMED, 2012) or USEPA RSLs (USEPA, 2013). The maximum concentrations of sec-butylbenzene (1,270 micrograms per kilogram [µg/kg]), ethylbenzene (4,590 µg/kg), isopropylbenzene (46,200 µg/kg), n-propylbenzene (2,390 µg/kg), 1,2,4-trimethylbenzene (2,070 µg/kg) and m,p-xylene (2,680 µg/kg) were detected in the primary and duplicate sample collected from soil boring SS61-SB72B located within Treatment Zone B at 29 ft bgs (Figure 6-1). The second semiannual VOC results were generally lower than the first semiannual VOC results.

6.1.2 Semi-Volatile Organic Compounds

Estimated concentrations of seven SVOCs were detected above the MDL in three subsurface soil samples (SS61-SB70B, –SB72B, and –SB73B) collected within Treatment Zones A and B

(Table 6-1). However, all detected SVOCs were several orders of magnitude below their applicable NMED SSLs (NMED, 2012).

6.1.3 Total Petroleum Hydrocarbons

TPH fractions GRO ($C_6 – C_{10}$), DRO ($C_{10} – C_{22}$), and/or ORO ($C_{22} – C_{36}$) were detected above the MDLs in six of the soil samples collected within Treatment Zones A and B (Table 6-1). The maximum concentrations of TPH-GRO (507 mg/kg) –DRO (10.8 J mg/kg) and –ORO (6.00 J) were all detected below the NMED TPH Screening Guideline (Residential Direct Exposure) for kerosene and jet fuel (1,000 mg/kg [NMED 2012, Table 6-3]). In addition, the maximum concentration of combined TPH-GRO/DRO/ORO (517.8 mg/kg) which was detected in soil sample SS61-SB70B-28 was also below the TPH Screening Guideline for kerosene and jet fuel (1,000 mg/kg). Overall, the second semiannual TPH-GRO results were lower than the first semiannual TPH-GRO results.

6.2 Third Semiannual Soil Analytical Results (October 2013)

A total of eight boreholes were advanced within Treatment Zones A (SS61-SB68C through SS61-SB71C) and B (SS61-SB72C through SS61-SB74C, and SS61-SB76C). The nine soil samples (including one duplicate) collected from these boreholes were analyzed for VOCs, SVOCs, and TPH (GRO, DRO, and ORO). During the third semiannual sampling event, the eight soil borings were drilled immediately adjacent to the original baseline soil borings (SS61-SB68 through SS61-SB74, and SS61-SB76) and subsequent semiannual soil borings. Soil samples were collected at the same interval as baseline and subsequent semiannual soil sampling events from each borehole.

The soil boring locations and analytical results above NMED SSLs and/or screening guidelines are shown on Figure 6-2 and the subsurface soil analytical results (detections and estimated values only) for the SS-61 third semiannual soil sampling event are summarized in Table 6-2. The drilling logs for the third semiannual sampling event are included in Appendix A. The following sections present a summary of the semiannual soil sampling results collected within Treatment Zones A and B in October 2013.

6.2.1 Volatile Organic Compounds

A total of 16 VOCs were detected above the MDL in the nine subsurface soil samples (including one duplicate) collected within Treatment Zones A and B (Table 6-2). One soil sample was collected per soil boring from the same interval as the baseline sample (interval with the highest baseline PID reading). One or more VOCs were detected above the MDL in each of the boreholes advanced.

Five boreholes (SS61-SB69C, –SB70C –SB71C, –SB73C and –SB76C) had the maximum concentrations of the 16 detected VOCs; however, all detected VOCs were below their applicable NMED SSLs (NMED, 2012) or USEPA RSLs (USEPA, 2013). The maximum concentrations of benzene (8,800 µg/kg), n-butylbenzene (148 J µg/kg), ethylbenzene (24,700 µg/kg), hexane (127 J µg/kg), isopropylbenzene (109,000 µg/kg), p-isopropyltoluene (87.6 J

µg/kg), n-propylbenzene (4,470 µg/kg), 1,2,4-trimethylbenzene (24,700 µg/kg), toluene (182 J µg/kg), m,p-xylene (17,600 µg/kg), and o-xylene (449 µg/kg) were detected in the sample collected from soil boring SS61-SB73C located within Treatment Zone B at 27 ft bgs (Figure 6-2). The third semiannual VOC results were generally higher than the second semiannual VOC results.

6.2.2 Semi-Volatile Organic Compounds

Low and estimated concentrations of 13 SVOCs were detected above the MDL in three subsurface soil samples collected within Treatment Zones A and B (Table 6-2). However, all detected SVOCs were several orders of magnitude below their applicable NMED SSLs (NMED, 2012).

6.2.3 Total Petroleum Hydrocarbons

TPH fractions GRO ($C_6 – C_{10}$), DRO ($C_{10} – C_{22}$), and/or ORO ($C_{22} – C_{36}$) were detected above the MDLs in seven of the soil samples collected within Treatment Zones A and B (Table 6-2). TPH-GRO was detected above the NMED TPH Screening Guideline (Residential Direct Exposure) for kerosene and jet fuel (1,000 mg/kg [NMED 2012, Table 6-3]) in two boreholes; SS61-SB70C (3,890 mg/kg [primary sample] / 1,320 mg/kg [duplicate sample]) and SS61-SB73C (1,400 mg/kg). These samples were visibly stained (gray) and had strong petroleum odors with PID readings ranging from 1,630 parts per million (ppm) (SS61-SB73C) to 3,302 ppm (SS61-SB70C). Soil samples collected from these two soil borings were the only samples during the third semiannual event that had a combined and/or singular concentration of TPH–GRO, –DRO, and –ORO which exceeded the NMED TPH Screening Guideline. Estimated detections of TPH–DRO were reported in two samples at concentrations ranging from 7.18 J mg/kg (SS61-SB70C-28) to 7.77 J mg/kg (SS61-SB73C-27). Estimated detections of TPH–ORO were reported in three samples at concentrations ranging from 4.63 J mg/kg (SS61-SB70C-28) to 6.21 J mg/kg (SS61-SB69C-30). Overall, the third semiannual TPH-GRO results were higher than the second semiannual TPH-GRO results.

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7 SUMMARY AND DISCUSSION OF ANALYTICAL RESULTS

This section discusses the significance of soil and groundwater analytical results from the SS-61 baseline sampling event, six quarterly groundwater sampling events (July/October-2012, and January/April/July/October-2013), and the three semiannual soil sampling events (October-2012, and April/October-2013). A detailed discussion of 2012 Performance Monitoring field activities performed at SS-61 is provided in the *Final 2012 Annual Performance Monitoring Progress Report, Building 1001 Fuel Spill Site, Holloman Air Force Base, New Mexico* (Bhate, 2013). Results from the 2013 soil and groundwater sampling events are summarized in Sections 5 and 6 of this Progress Report. In addition, the soil and groundwater sampling locations and exceedences above applicable action levels for 2013 performance monitoring sampling events are presented in Figures 5-1 through 5-8 and 6-1 through 6-2 of this report.

Comparisons between the baseline and subsequent quarterly sampling events indicate that VOC concentrations have decreased significantly and the number of monitoring wells with VOCs detections above applicable action levels has been reduced from eight to five wells. Furthermore, Figures 7-1 through 7-3 illustrate the decreasing trends for the three VOCs detected above their respective USEPA MCLs during the baseline sampling event (benzene, 1,2-DCA, and ethylbenzene respectively). It should be noted that p-dichlorobenzene concentrations in monitoring well SS61-MW25 have exceeded the USEPA MCL in 3 of the last 4 quarterly sampling events, after not exceeding the MCL during the initial 3 rounds of sampling (baseline, quarter 1, and quarter 2). P-dichlorobenzene or 1,4-dichlorobenzene is used as a disinfectant or as a pesticide. It has no military application and has not been used as an additive in aviation fuel. The recent increases of 1,4-dichlorobenzene in SS61-MW25 may be the result of recent dewatering activities at the SS-61 Site. The cone of depression resulting from dewatering activities to facilitate PCS excavation has increased the seepage velocity towards the excavation area, with groundwater flowing from south of SS61-MW25 and perpendicular to Treatment Zone B to the north as it crosses Dezonia Road.

Sixteen SVOCs were detected above the MDL during the baseline groundwater sampling event. Comparisons between the baseline and subsequent quarterly sampling events indicated that SVOC concentrations have decreased from sixteen detections in January 2012 to eleven SVOC detections above the MDL at the end of sixth quarterly sampling event. In addition, Figure 7-4 shows a decreasing trend for phenol which was detected above the NMWQCC standard in three wells during the baseline sampling event. It should be noted that 1,4-dichlorobenzene concentrations in monitoring well SS61-MW25 have exceeded the USEPA MCL in 2 of the last 3 quarterly sampling events, after not exceeding the MCL during the initial 4 rounds of sampling (baseline, quarter 1, quarter 2, and quarter 3).

TPH fractions GRO ($C_6 – C_{10}$), DRO ($C_{10} – C_{22}$), and/or ORO ($C_{22} – C_{36}$) were detected above the MDLs in the groundwater samples collected from nine of the 10 performance monitoring wells during the baseline sampling event. TPH-GRO was detected above the NMED TPH Screening Guideline (Concentration in Groundwater) for kerosene and jet fuel in the two groundwater samples (primary and duplicate) collected from SS61-MW24 which is located

within Treatment Zone B at a maximum concentration of 32.2 mg/L. TPH-DRO was detected in nine of the baseline groundwater samples with concentrations ranging from 0.196 J mg/L (SS61-MW27) to 2.24 mg/L (SS61-MW25) and TPH-ORO was detected in one sample at a concentration of 0.113 J mg/L (SS61-MW29). Comparisons between the baseline and subsequent quarterly sampling events indicate that TPH concentrations have decreased significantly within Treatment Zones A and B. Figure 7-5 shows a steady declining trend for TPH-GRO which was detected above the TPH Screening Guideline (18.5 mg/L) in monitoring well SS61-MW24 during the baseline sampling event. Furthermore, TPH-GRO, –DRO, and/or –ORO (singular or combined) were not detected above the NMED TPH Screening Guideline for kerosene and jet fuel in any of the groundwater samples up to the end of the sixth quarterly sampling event. The maximum combined concentration of TPH-GRO/DRO/ORO was detected in the duplicate groundwater sample collected from SS61-MW25 at 5.509 mg/L during the sixth quarterly sampling event.

Comparisons between the baseline and six subsequent quarterly sampling events indicated that TDS has remaining relatively unchanged. Observed TDS concentrations less than 10,000 mg/L are most likely anthropogenic due to leaks in the Dezonia Road water line, therefore the natural TDS concentration at SS-61 is > 10,000 mg/L. As a result, this aquifer is classified by USEPA as a Class III B aquifer (TDS > 10,000 mg/L) which is designated as unfit for human consumption (USEPA, 1986).

Laboratory natural attenuation parameters were collected as part of the performance groundwater monitoring to determine the effectiveness of the AISEB remediation system (Treatment Zones A and B). Samples collected were analyzed for hydrogen sulfide, ferric iron, ferrous iron, iron (total), manganese (total and dissolved), ammonia, nitrate, TKN, BOD, COD, and sulfate for all three sampling events. Monitoring Well Sample Collection Forms are included as Appendix B. With the exception of dissolved manganese and total iron, the laboratory MNA parameters remained unchanged across the baseline and subsequent 6 quarterly sampling events. Dissolved manganese concentrations have decreased significantly in seven of the 10 performance monitoring wells (SS61-MW23, SS61-MW24, SS61-MW25, SS61-MW26, SS61-MW29, SS61-MW30, and SS61-MW31). Total iron concentrations also decreased in six of the seven performance monitoring wells listed above (SS61-MW23, SS61-MW24, SS61-MW25, SS61-MW26, SS61-MW29, and SS61-MW30).

Field parameters were collected as part of the performance groundwater monitoring to determine the effectiveness of the AISEB remediation system (Treatment Zones A and B). Field parameters were measured for temperature, pH, conductivity, dissolved oxygen (DO), turbidity, and oxidative reductive potential (ORP). Monitoring Well Sample Collection Forms are included as Appendix B. Prior to AISEB remedial operations, field measurements of DO indicated strong evidence that anaerobic biodegradation was occurring within the SS-61 aquifer. Three unusually high readings on DO were discarded as erroneous during the baseline-sampling event for SS61-MW25, SS61-MW28 and SS61-MW29. These concentrations of DO (in an area with organic contamination) are indicative of aerobic biodegradation of organic carbon. However, as oxygen is consumed, the aquifer goes from oxic (oxygenated) to anoxic (oxygen deficient) conditions, anaerobic process take over and are required to promote fuels degradation.

Depleted oxygen concentrations, depressed nitrate concentrations (the average baseline sampling concentrations was 2.12 mg/L), levels of iron, manganese and sulfate below background in an area with contamination, and an average ORP of -171 millivolts (mV) are all strong indicators that anaerobic biodegradation of organic carbon was occurring during the baseline sampling event.

An impact of remedial operations on aquifer conditions at the end of the sixth quarterly sampling event is a shift from anoxic to oxic conditions due to abiotic processes (air injection). Dissolved manganese concentrations have decreased significantly in seven of the 10 performance monitoring wells (SS61-MW23, SS61-MW24, SS61-MW25, SS61-MW26, SS61-MW29, SS61-MW30, and SS61-MW31). Total iron concentrations have decreased significantly in six of the seven performance monitoring wells listed above (SS61-MW23, SS61-MW24, SS61-MW25, SS61-MW26, SS61-MW29, and SS61-MW30).

Simultaneously, comparisons between the baseline and six quarterly sampling events in the five monitoring wells mentioned above indicated significant increases in both DO concentrations and ORP values. The oxidation/reduction potential (redox) of groundwater (Eh) is the measure of electron activity and is an indicator of the relative tendency of a solution to accept or transfer electrons. Redox reactions in groundwater contaminated with petroleum hydrocarbons are usually biologically mediated, and therefore, the redox potential of a groundwater system depends upon and influences rates of biodegradation. The average ORP value for SS61-MW26, SS61-MW28, SS61-MW29, SS61-MW30, and SS61-MW31 was -121.0 mV during the baseline-sampling event. However, the ORP value for the same five wells at the end of the sixth monitoring event produced an ORP value of 81.4 mV. This suggests that the aquifer if moving from a strong reducing environment to a more favorable petroleum hydrocarbon oxidizing environment.

Comparisons between the semiannual soil sampling events indicate that VOC concentrations have decreased significantly. Two elevated detections of TPH in October 2013 at SS61-SB70 and SS61-SB73 suggest that the soils at SS-61 have a high degree of spatial variability between consecutive sampling events as wells as reproducibility of sample results. Previous sampling results at SS61-SB70 and SS61-SB73 were between one and three orders of magnitude less than the results on October 2013. Furthermore, a review of the data validation report for the four previous sampling events indicates that duplicate soil samples have repeatedly been flagged with "J" due to relative percent difference (RPD) inconsistencies. These inconsistencies suggest a high degree of soil heterogeneity at SS-61. These inconsistencies are highlighted in the October 22, 2013 sampling event were isopropylbenzene had a reported concentration of 67,700 µg/kg in primary sample versus the duplicate value of 8,870 µg/kg. Additional inconsistencies have been noted in various data validation reports since January 2012 most notably with sec-butylbenzene, tert-butylbenzene, and TPH-GRO. The RPD inconsistencies that have been noted since January 2012 appear to be more pronounced with the higher volatile organic compounds and less with the multi-ring polycyclic aromatic hydrocarbons (PAHs). Based on the preponderance of sampling data and trend analysis indicating decreasing hydrocarbon concentrations across the Site in both the soil and groundwater as a result of the remedial efforts at SS-61, Bhate does not recommend any modification to the remedial systems operations at this time.

In Summary, remedial operations have had a significant impact on VOCs, SVOCs, and TPH-GRO, –DRO, and/or –ORO in both the soil and groundwater. VOC and TPH-GRO results for soils were generally lower than the baseline-sampling event and all subsurface SVOC soil samples collected within Treatment Zones A and B were significantly below their applicable NMED SSLs (NMED, 2012). VOC and SVOC groundwater concentrations have decreased significantly within Treatment Zones A and B. TPH-GRO, –DRO. and/or –ORO (singular or combined) were not detected above the NMED TPH Screening Guideline (Concentration in Groundwater) for kerosene and jet fuel in any of the groundwater samples at the end of the sixth quarterly sampling event. TDS concentrations along Dezonia Road are depressed below 10,000 mg/L are most likely due to leaking infrastructure but the bulk of the site exhibits TDS concentrations in excess of 10,000 mg/L. As a result, this aquifer is classified by USEPA as a Class III B aquifer (TDS > 10,000 mg/L) which is designated as unfit for human consumption (USEPA, 1986). Finally, significant shifts in the ORP in five out of the 10 performance monitoring wells suggests that the aquifer is moving from a strongly reducing environment to a more favorable petroleum hydrocarbon oxidizing environment.

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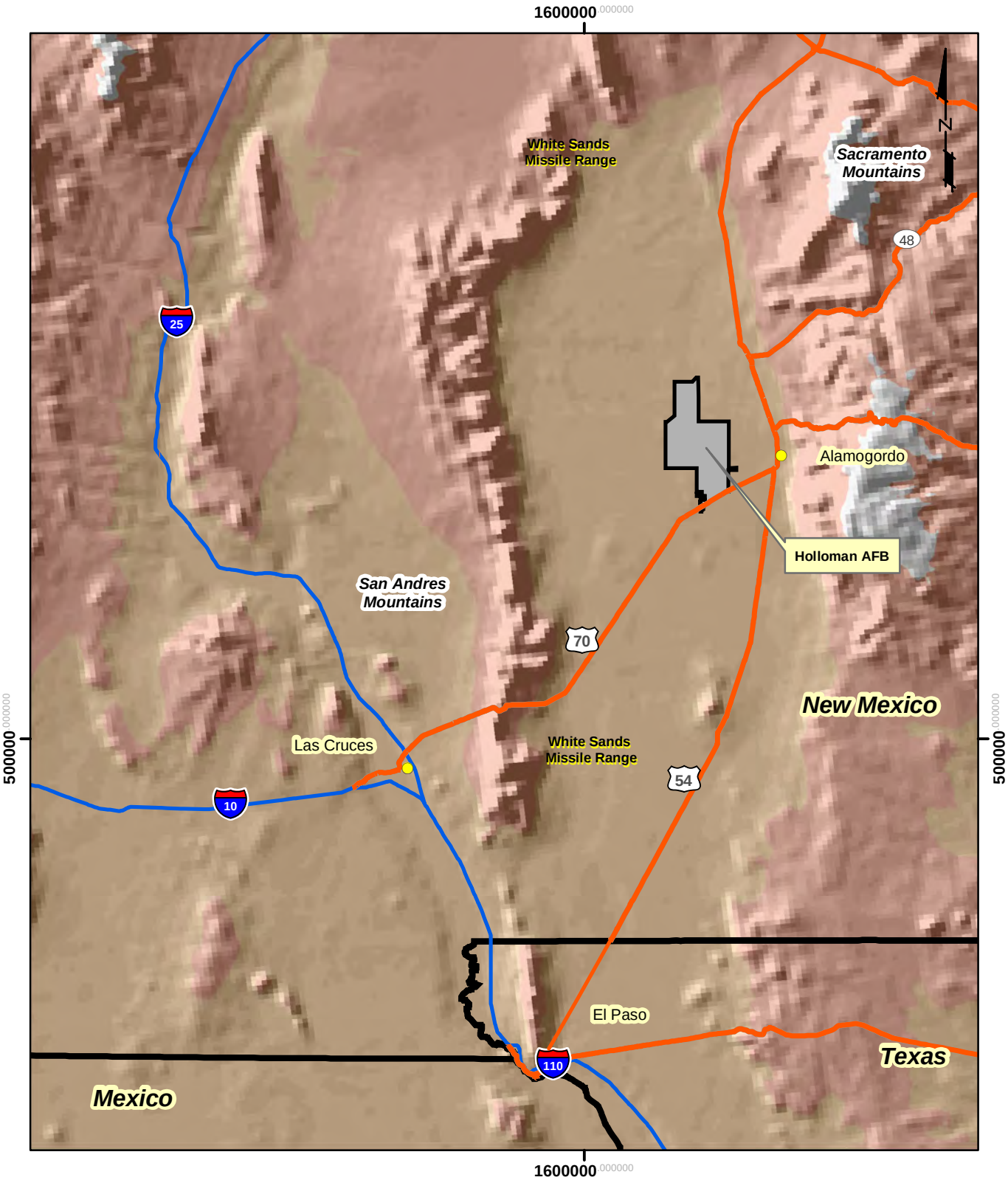
FIGURES



0 4.5 9 18 27 36 Miles

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

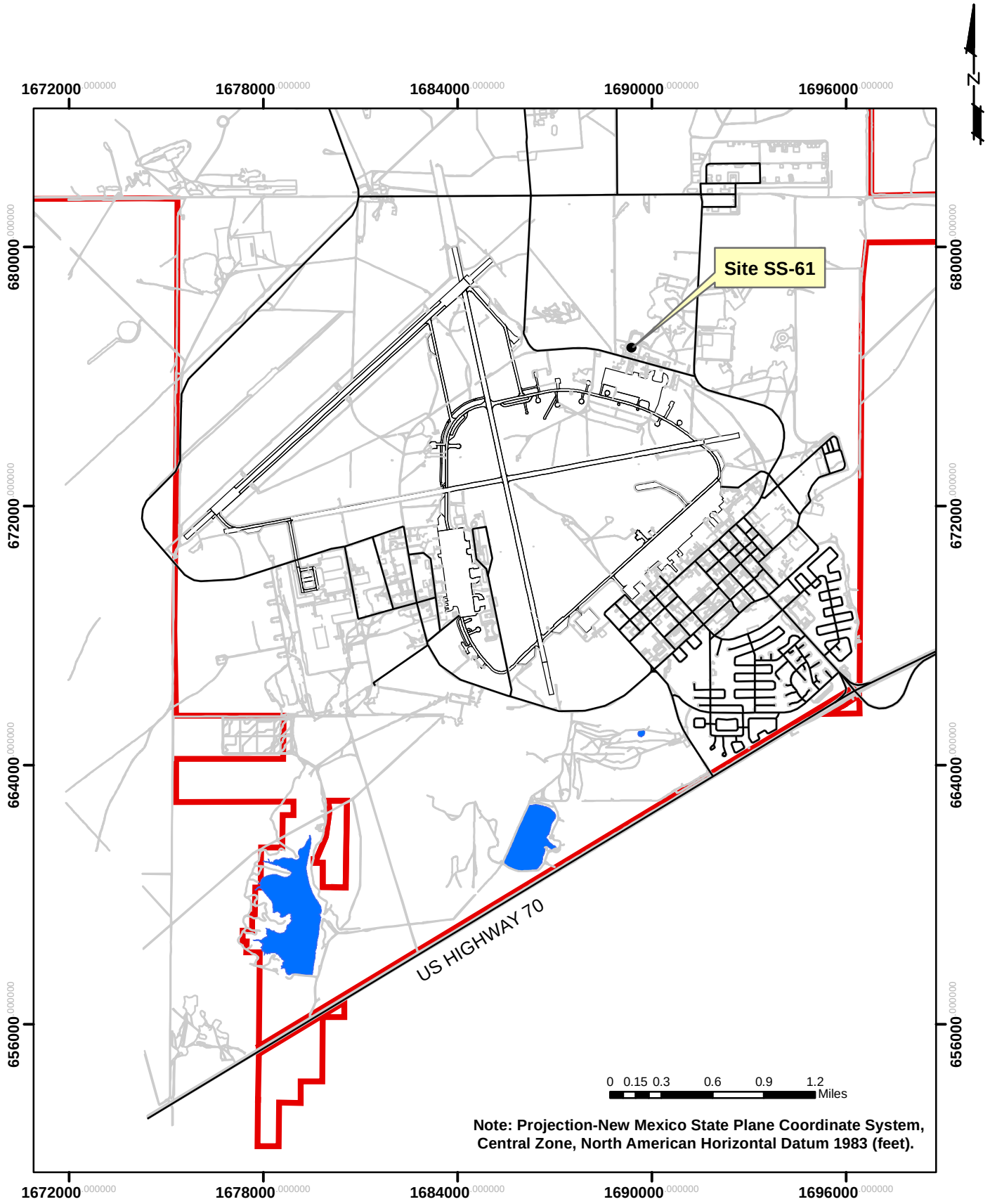
bhate ENVIRONMENT INFRASTRUCTURE

Holloman AFB, New Mexico Location Map

PROJECT NO.	SCALE	DATE	DRAWN BY:
9100133	1"=18 Miles	4/24/13	cm
			DRAWING NO: Figure 2-1

Site SS61
2013 Annual Performance Monitoring Progress Report
Holloman Air Force Base, New Mexico

Figure 2-1



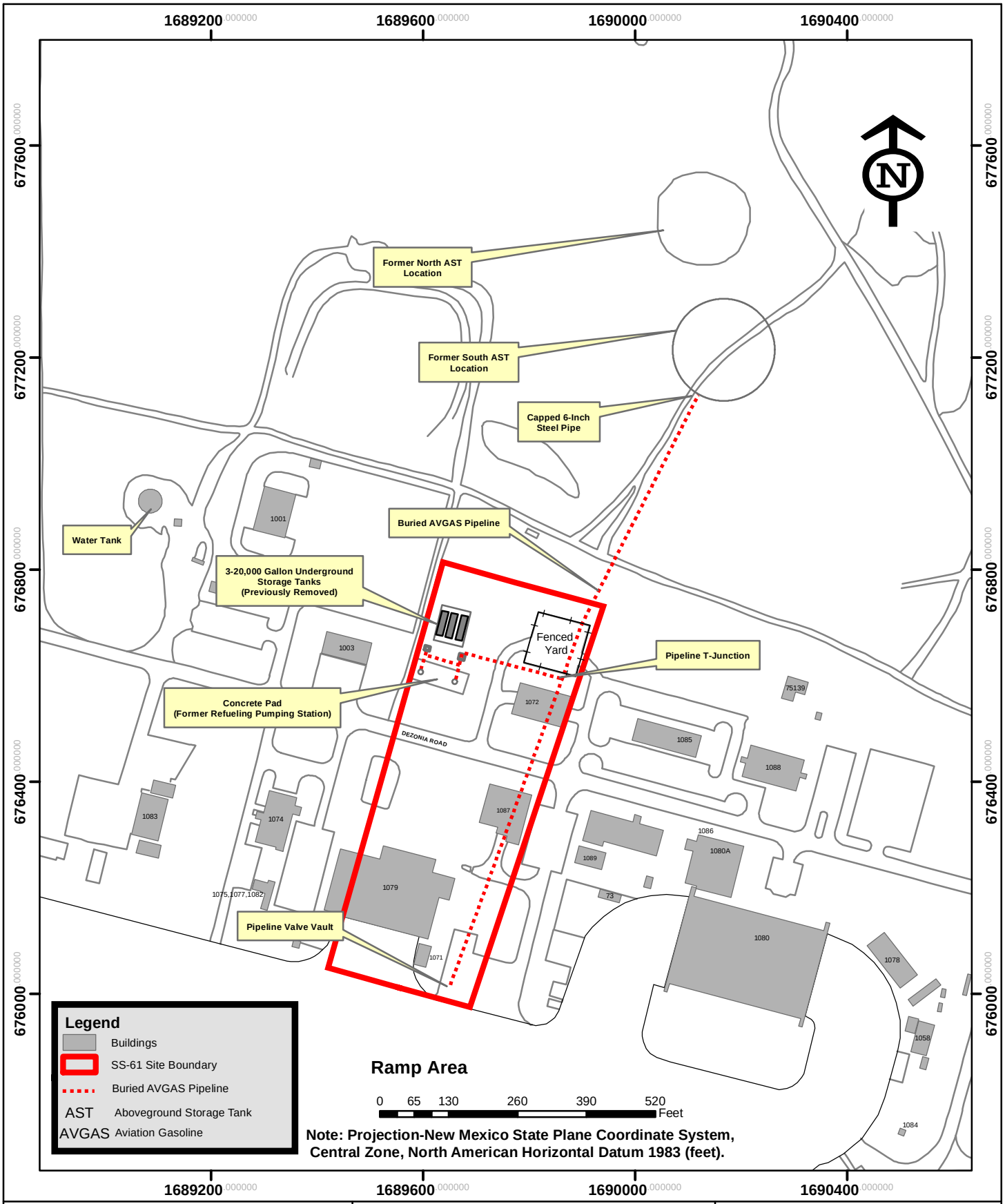
bhate ENVIRONMENT INFRASTRUCTURE

SS-61
Site Location Map

PROJECT NO.	SCALE	DATE	DRAWN BY:
9100133	Shown	4/24/13	cm
			DRAWING NO: Figure 2-2

Site SS61
2013 Annual Performance
Monitoring Progress Report
Holloman Air Force Base, New Mexico

Figure 2-2



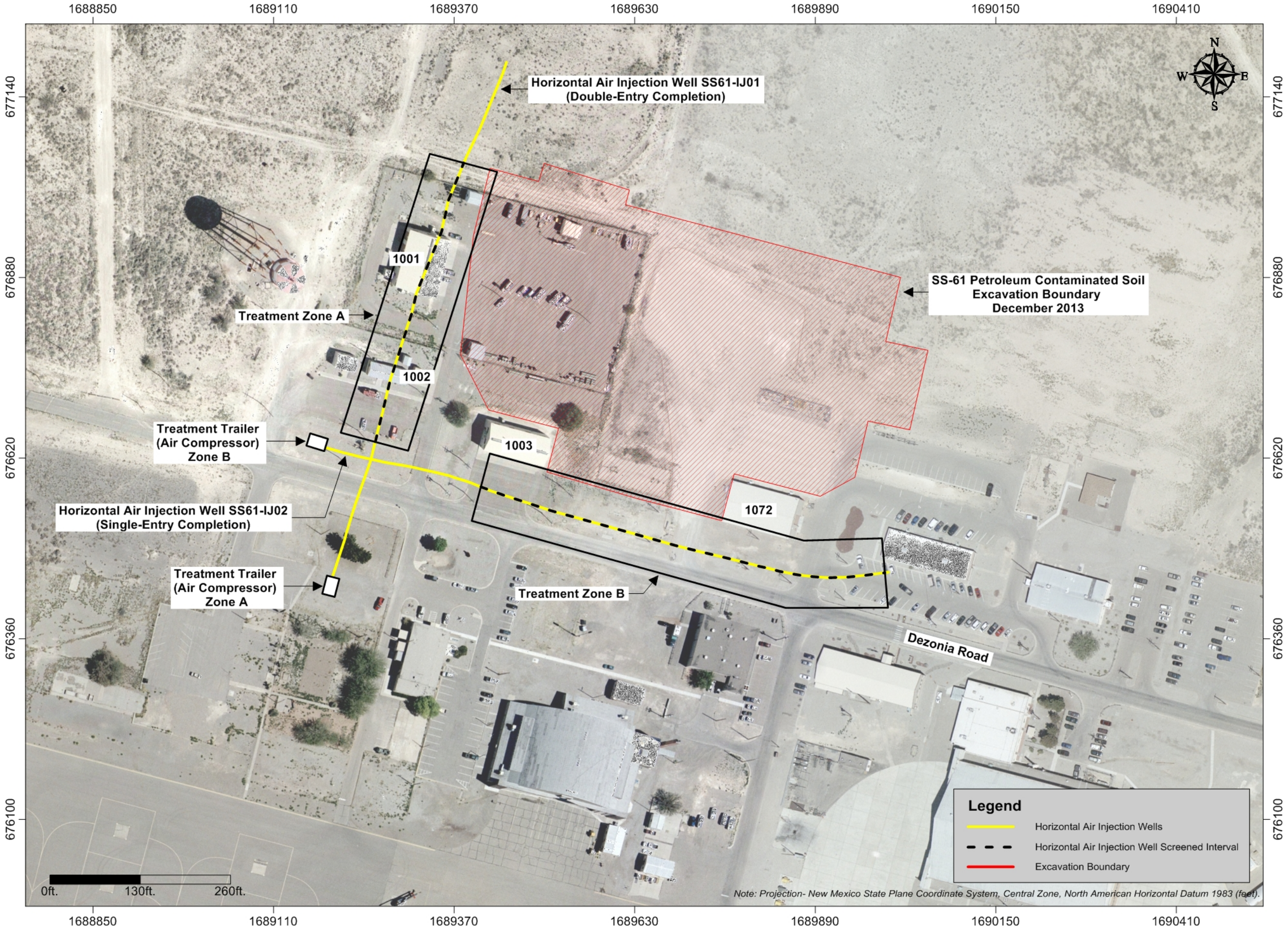
bhate ENVIRONMENT INFRASTRUCTURE

SS-61
Site Map

PROJECT NO.	SCALE	DATE	DRAWN BY: cm
9100133	1"=250'	4/24/13	DRAWING NO: Figure 2-3

Site SS61
2013 Annual Performance Monitoring Progress Report
Holloman Air Force Base, New Mexico

Figure 2-3



Site SS-61
2013 Annual Performance Monitoring
Progress Report
Holloman Air Force Base, New Mexico

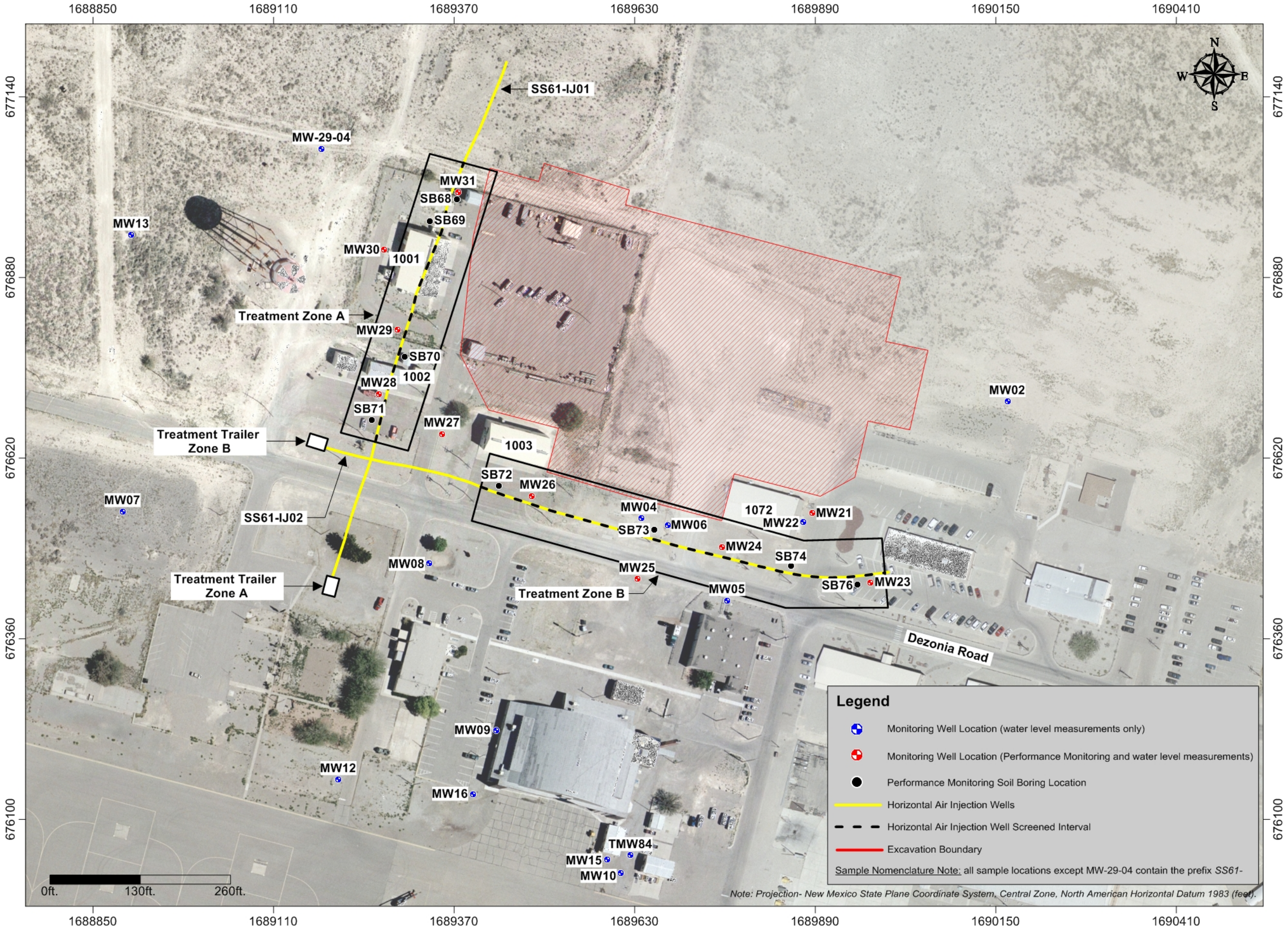
Figure 4-1

Horizontal Air Injection Well Locations and Treatment Zones

PROJECT NO.	SCALE	DATE	DRAWN BY:
9100133	1" = 130'	4/29/2013	dtm

DRAWING NO: Fig. 4-1

bhate ENVIRONMENT INFRASTRUCTURE



Site SS-61
2013 Annual Performance Monitoring
Progress Report
Holloman Air Force Base, New Mexico

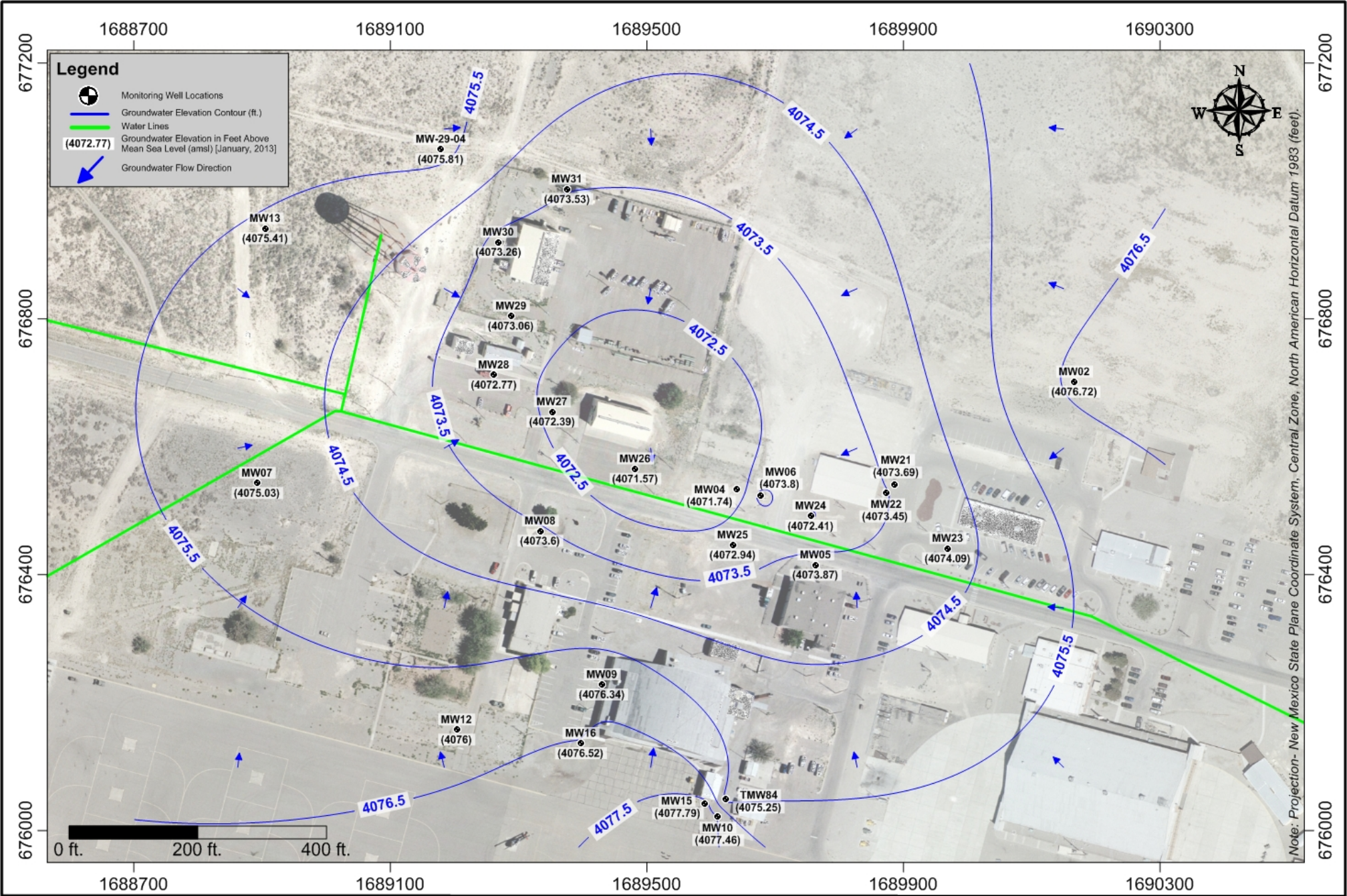
Figure 4-2

Treatment Zones, System Configuration, Monitoring Well and Sampling Locations

PROJECT NO.	SCALE	DATE	DRAWN BY:
9100133	1" = 130'	4/29/2013	dtm

DRAWING NO: Fig. 4-2

bhate ENVIRONMENT INFRASTRUCTURE



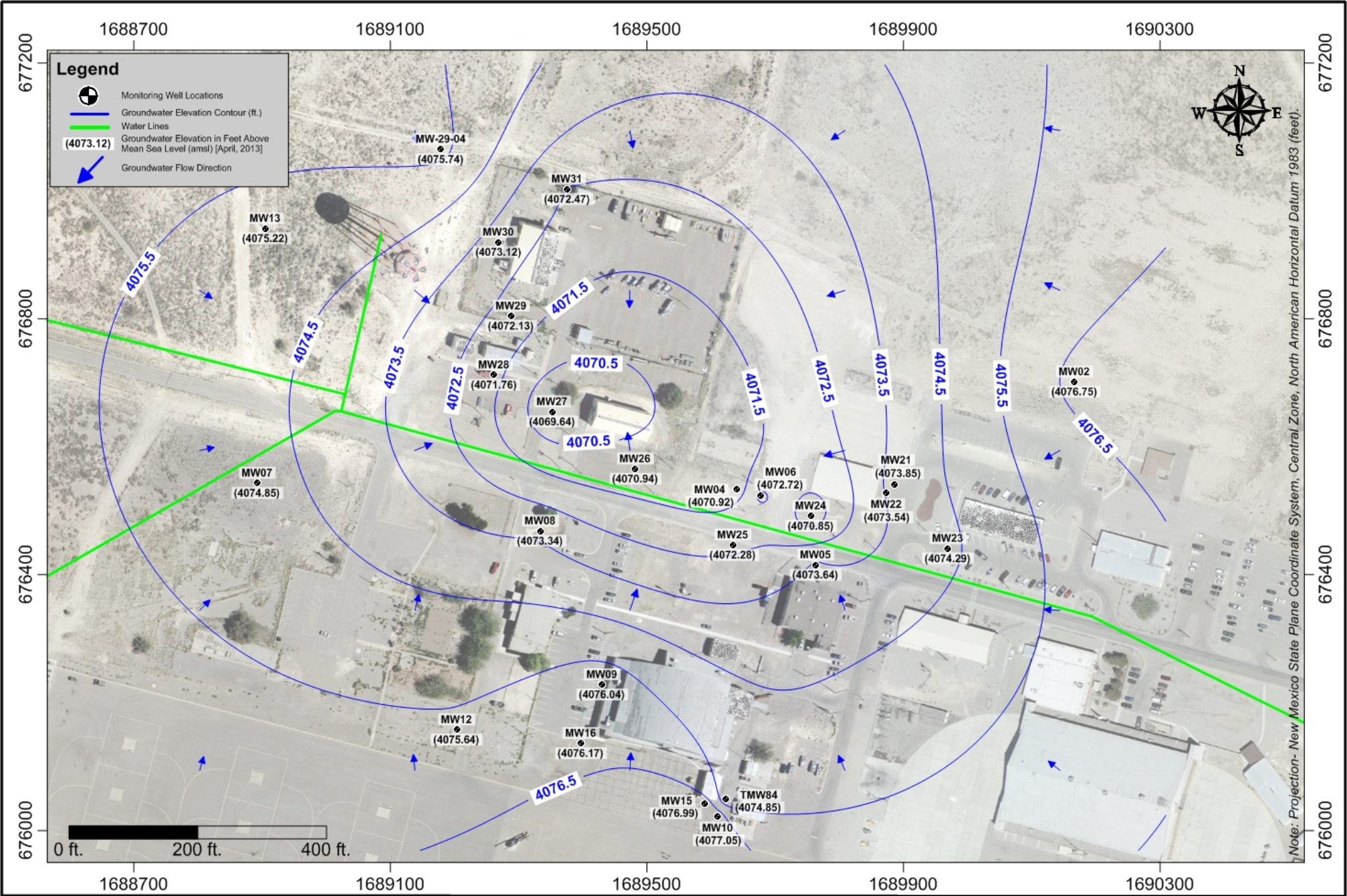
bhate ENVIRONMENT INFRASTRUCTURE

Potentiometric Surface Map (January 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:
9100133	1" = 200'	4/29/2013	dtm
			DRAWING NO: Fig. 4-3

Site SS-61
2013 Annual Performance Monitoring Progress Report
Holloman Air Force Base, New Mexico

Figure 4-3



bhate ENVIRONMENT INFRASTRUCTURE

Potentiometric Surface Map (April 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:
9100133	1" = 200'	4/29/2013	dtm
			DRAWING NO: Fig. 4-4

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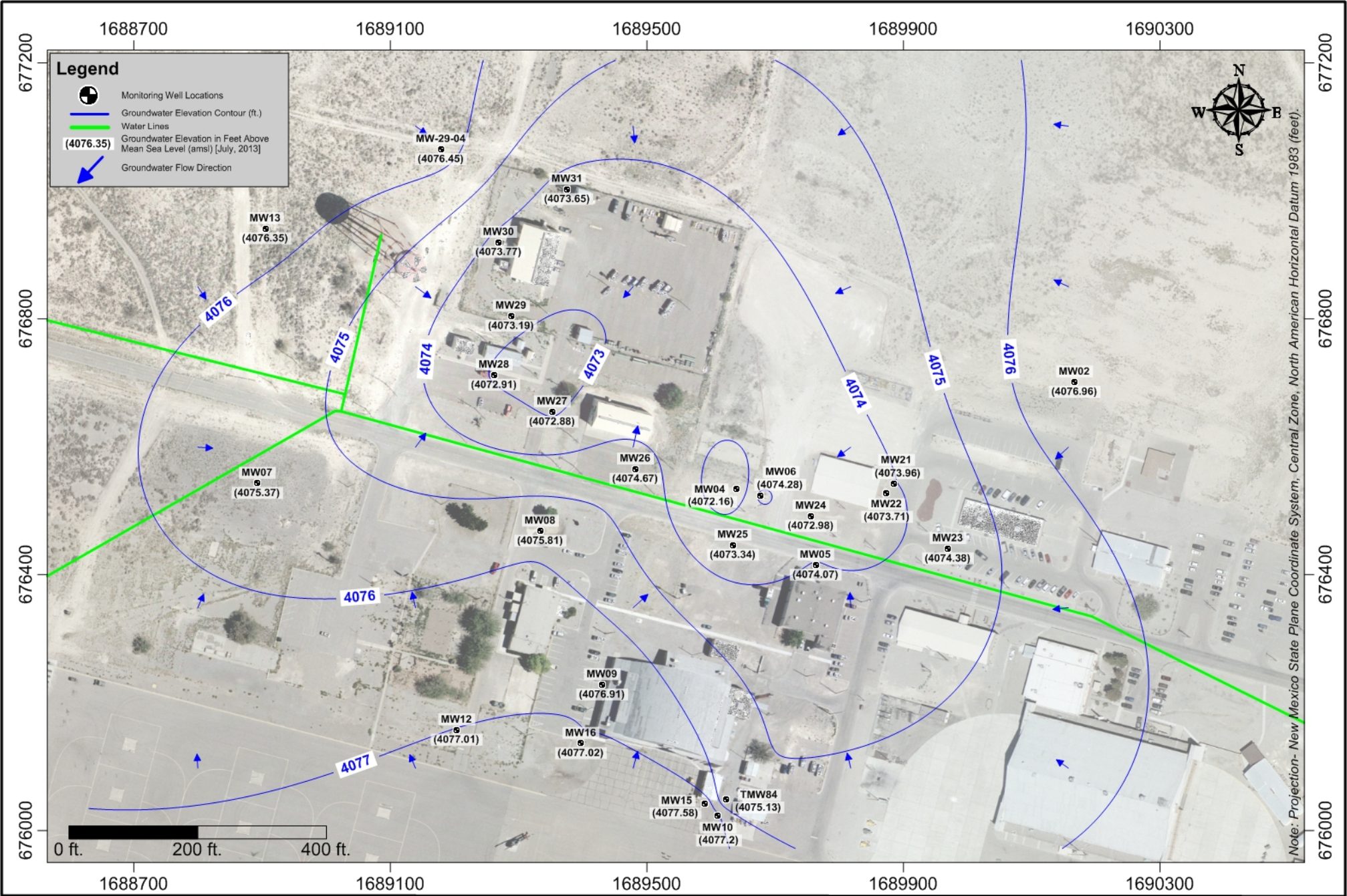
Figure 4-4



bhate ENVIRONMENT INFRASTRUCTURE

Potentiometric Surface Map (July 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:
9100133	1" = 200'	7/24/2013	dtm
			DRAWING NO: Fig. 4-5

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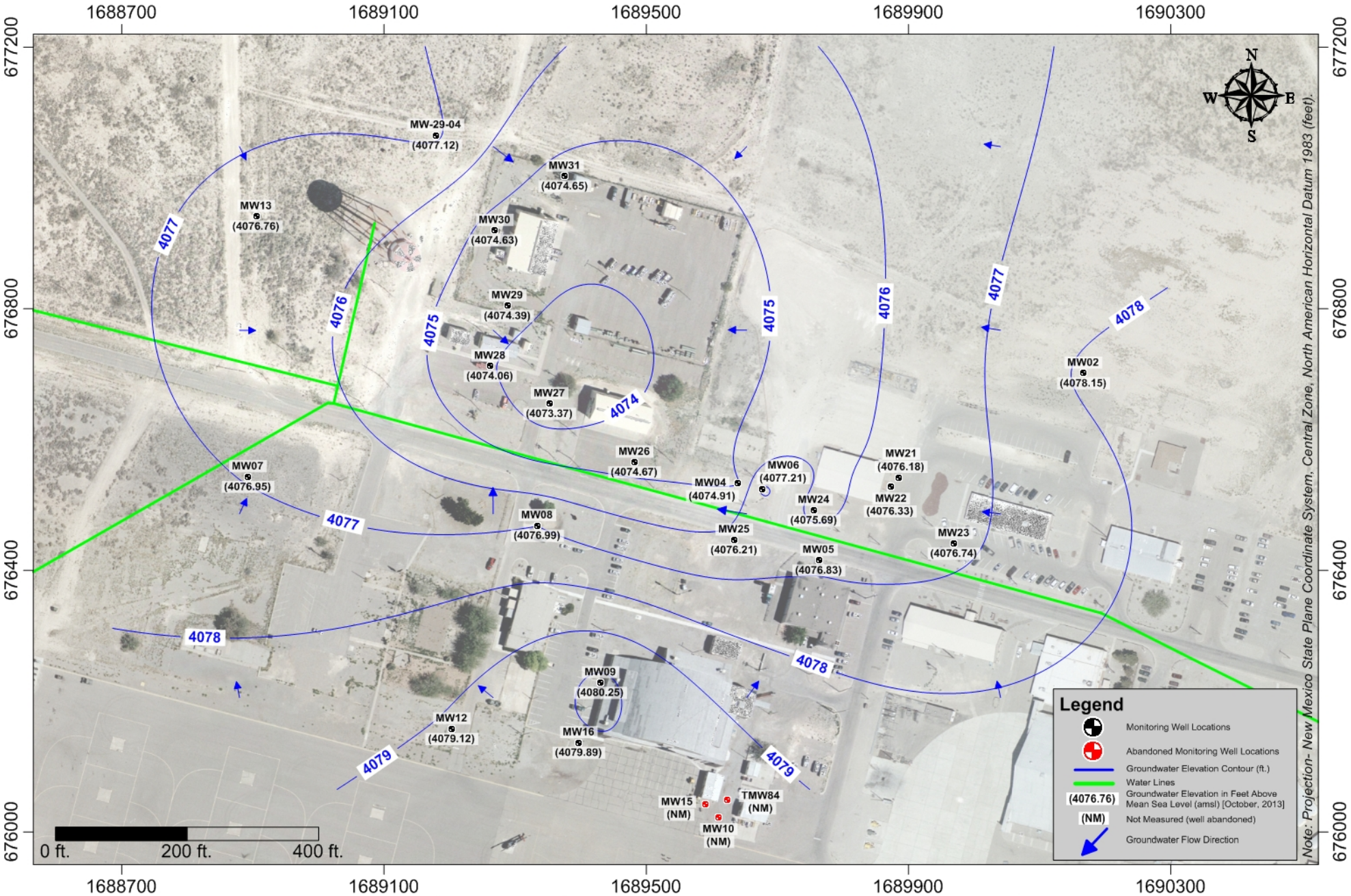
Figure 4-5



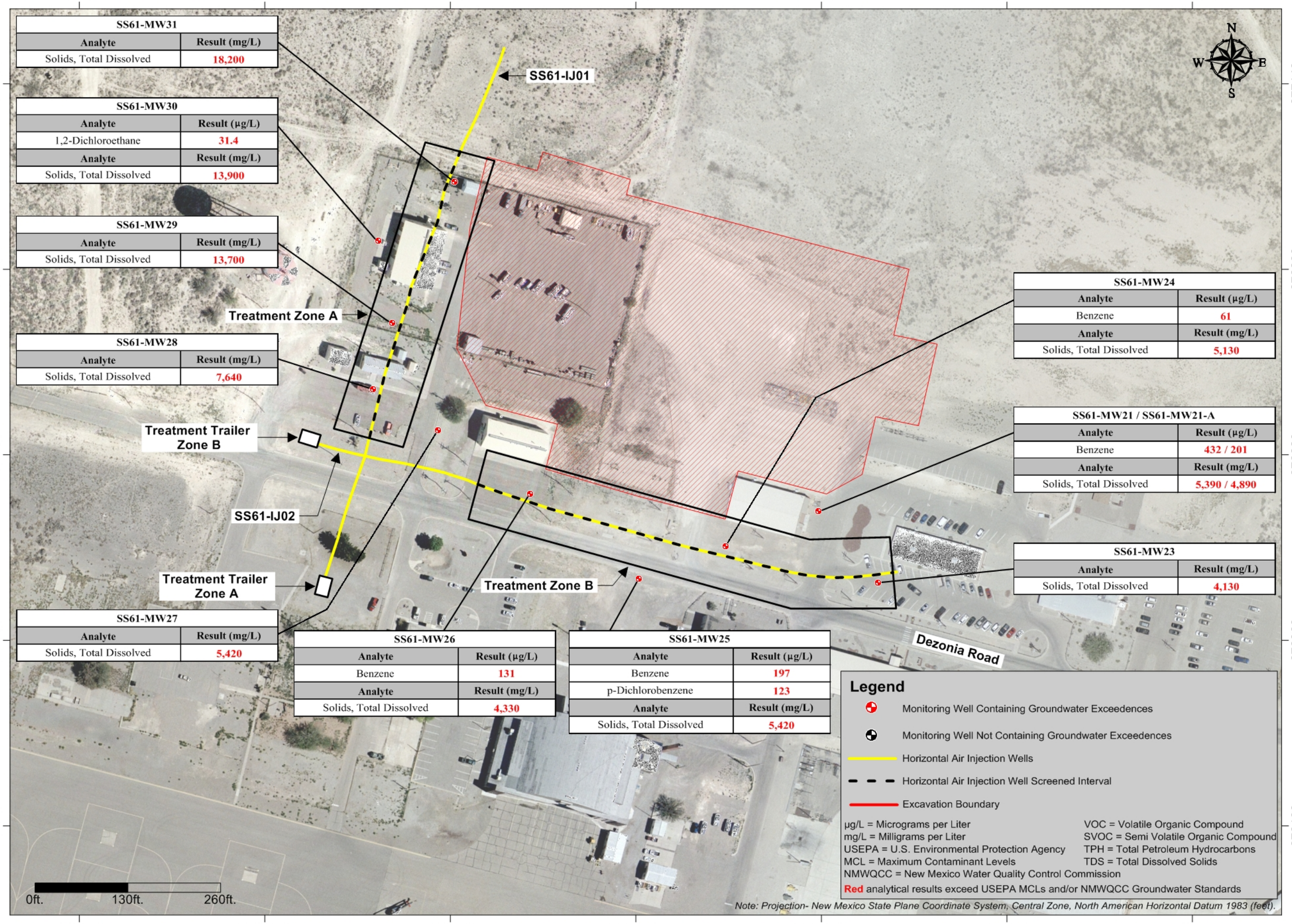
bhate ENVIRONMENT INFRASTRUCTURE

Potentiometric Surface Map (October 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:
9100133	1" = 200'	10/28/2013	dtm
			DRAWING NO: Fig. 4-6

Site SS-61
2013 Annual Performance Monitoring Progress Report
Holloman Air Force Base, New Mexico

Figure 4-6



SS61-MW31

Analyte	Result (mg/L)
Solids, Total Dissolved	18,200

SS61-MW30

Analyte	Result (µg/L)
1,2-Dichloroethane	31.4
Analyte	**Result (mg/L)**
Solids, Total Dissolved	13,900

SS61-MW29

Analyte	Result (mg/L)
Solids, Total Dissolved	13,700

SS61-MW28

Analyte	Result (mg/L)
Solids, Total Dissolved	7,640

SS61-MW24

Analyte	Result (µg/L)
Benzene	61
Analyte	**Result (mg/L)**
Solids, Total Dissolved	5,130

SS61-MW21 / SS61-MW21-A

Analyte	Result (µg/L)
Benzene	432 / 201
Analyte	**Result (mg/L)**
Solids, Total Dissolved	5,390 / 4,890

SS61-MW23

Analyte	Result (mg/L)
Solids, Total Dissolved	4,130

SS61-MW27

Analyte	Result (mg/L)
Solids, Total Dissolved	5,420

SS61-MW26

Analyte	Result (µg/L)
Benzene	131
Analyte	**Result (mg/L)**
Solids, Total Dissolved	4,330

SS61-MW25

Analyte	Result (µg/L)
Benzene	197
p-Dichlorobenzene	123
Analyte	**Result (mg/L)**
Solids, Total Dissolved	5,420

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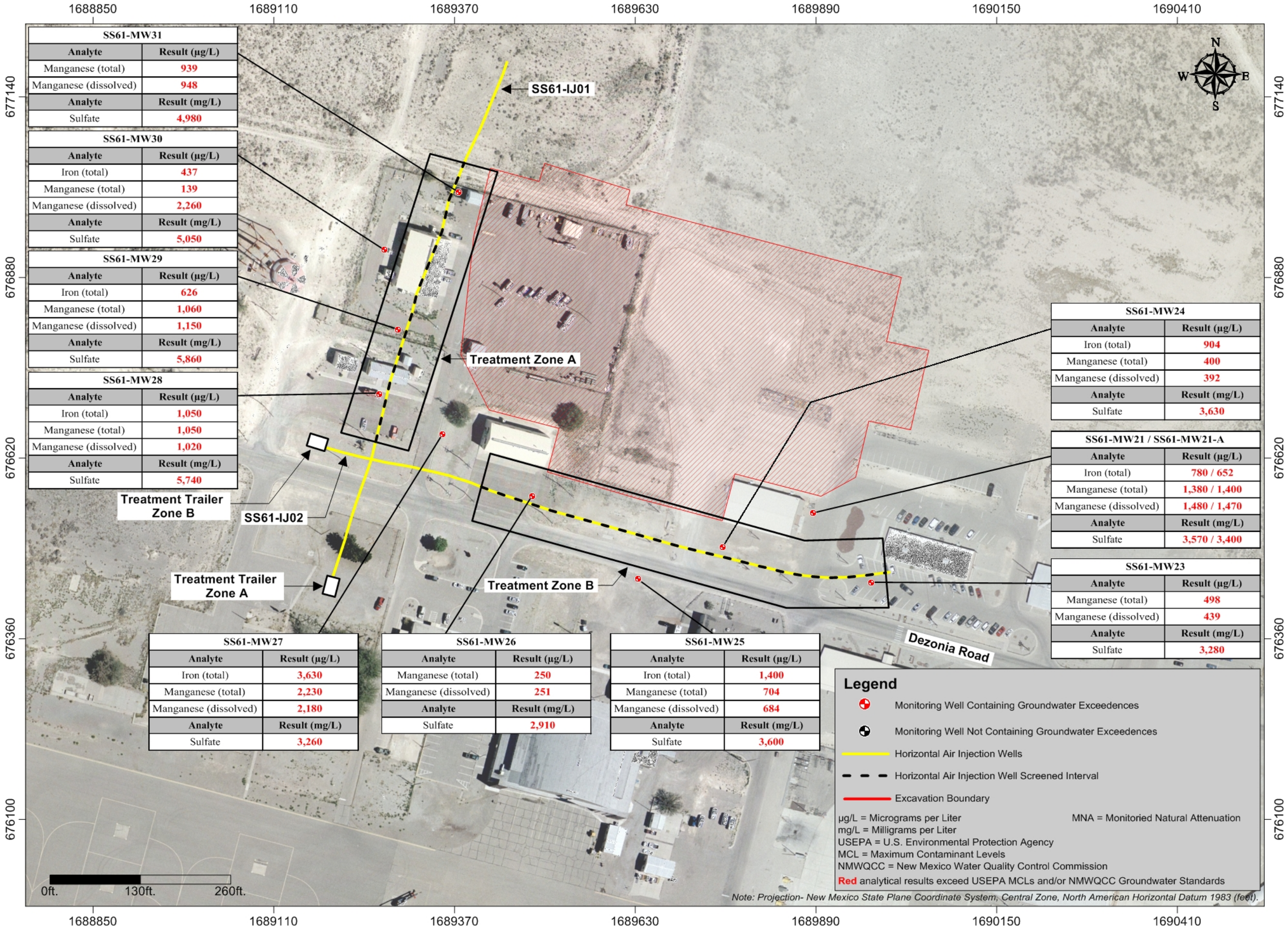
Figure 5-1

Groundwater Analytical Results Above Action Levels [VOC, SVOC, TPH, and TDS] (January 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:	DRAWING NO:
9100133	1" = 130'	4/29/2013	dtm	Fig. 5-1

bhate ENVIRONMENT INFRASTRUCTURE



SS61-MW31

Analyte	Result (µg/L)
Manganese (total)	939
Manganese (dissolved)	948
Analyte	**Result (mg/L)**
Sulfate	4,980

SS61-MW30

Analyte	Result (µg/L)
Iron (total)	437
Manganese (total)	139
Manganese (dissolved)	2,260
Analyte	**Result (mg/L)**
Sulfate	5,050

SS61-MW29

Analyte	Result (µg/L)
Iron (total)	626
Manganese (total)	1,060
Manganese (dissolved)	1,150
Analyte	**Result (mg/L)**
Sulfate	5,860

SS61-MW28

Analyte	Result (µg/L)
Iron (total)	1,050
Manganese (total)	1,050
Manganese (dissolved)	1,020
Analyte	**Result (mg/L)**
Sulfate	5,740

SS61-MW24

Analyte	Result (µg/L)
Iron (total)	904
Manganese (total)	400
Manganese (dissolved)	392
Analyte	**Result (mg/L)**
Sulfate	3,630

SS61-MW21 / SS61-MW21-A

Analyte	Result (µg/L)
Iron (total)	780 / 652
Manganese (total)	1,380 / 1,400
Manganese (dissolved)	1,480 / 1,470
Analyte	**Result (mg/L)**
Sulfate	3,570 / 3,400

SS61-MW23

Analyte	Result (µg/L)
Manganese (total)	498
Manganese (dissolved)	439
Analyte	**Result (mg/L)**
Sulfate	3,280

SS61-MW27

Analyte	Result (µg/L)
Iron (total)	3,630
Manganese (total)	2,230
Manganese (dissolved)	2,180
Analyte	**Result (mg/L)**
Sulfate	3,260

SS61-MW26

Analyte	Result (µg/L)
Manganese (total)	250
Manganese (dissolved)	251
Analyte	**Result (mg/L)**
Sulfate	2,910

SS61-MW25

Analyte	Result (µg/L)
Iron (total)	1,400
Manganese (total)	704
Manganese (dissolved)	684
Analyte	**Result (mg/L)**
Sulfate	3,600

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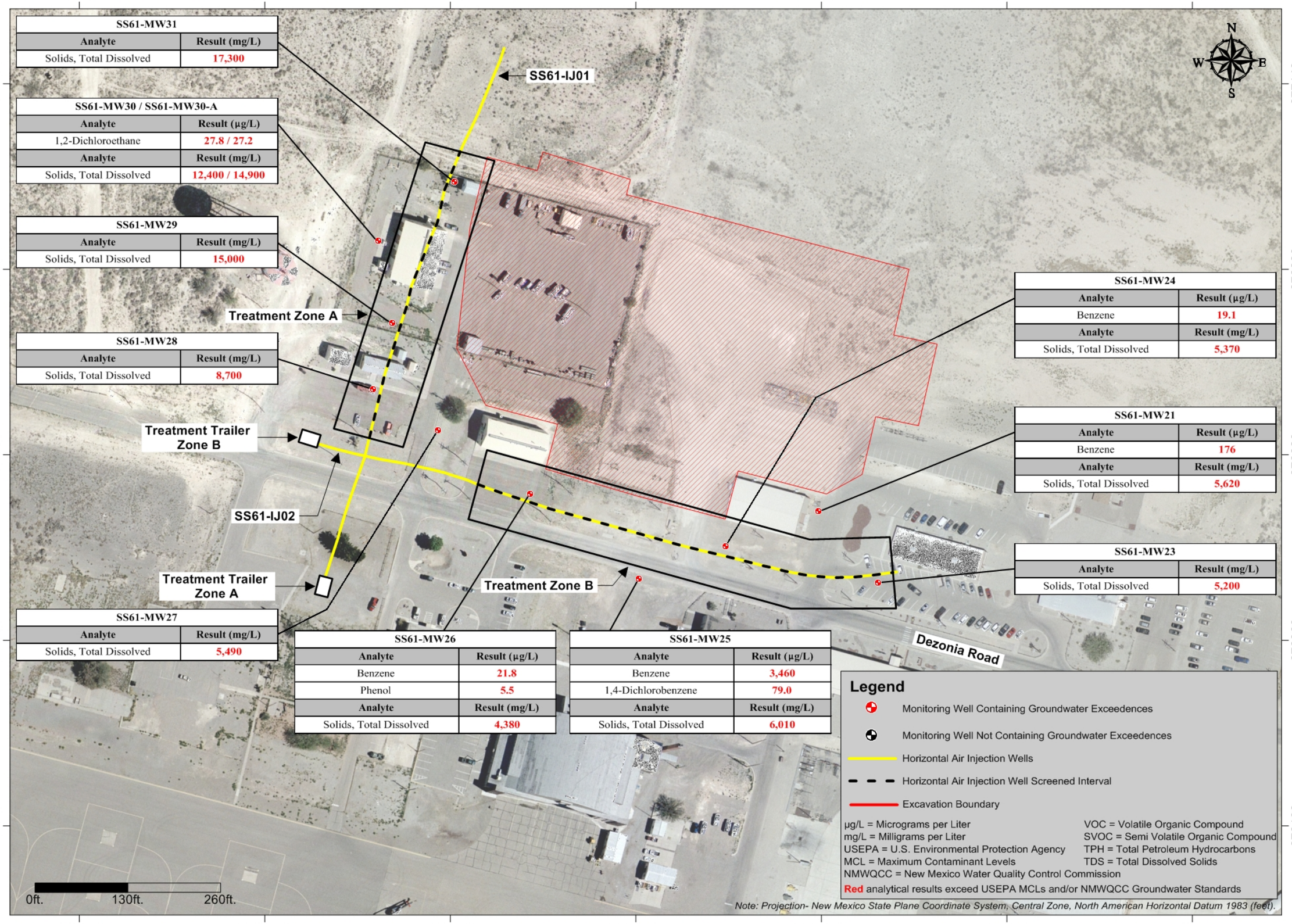
Figure 5-2

Groundwater Analytical Results Above Action Levels [MNA Parameters] (January 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:	DRAWING NO:
9100133	1" = 130'	5/01/2013	dtm	Fig. 5-2

bhate ENVIRONMENT INFRASTRUCTURE



SS61-MW31

Analyte	Result (mg/L)
Solids, Total Dissolved	17,300

SS61-MW30 / SS61-MW30-A

Analyte	Result (µg/L)
1,2-Dichloroethane	27.8 / 27.2
Analyte	**Result (mg/L)**
Solids, Total Dissolved	12,400 / 14,900

SS61-MW29

Analyte	Result (mg/L)
Solids, Total Dissolved	15,000

SS61-MW28

Analyte	Result (mg/L)
Solids, Total Dissolved	8,700

SS61-MW27

Analyte	Result (mg/L)
Solids, Total Dissolved	5,490

SS61-MW26

Analyte	Result (µg/L)
Benzene	21.8
Phenol	5.5
Analyte	**Result (mg/L)**
Solids, Total Dissolved	4,380

SS61-MW25

Analyte	Result (µg/L)
Benzene	3,460
1,4-Dichlorobenzene	79.0
Analyte	**Result (mg/L)**
Solids, Total Dissolved	6,010

SS61-MW24

Analyte	Result (µg/L)
Benzene	19.1
Analyte	**Result (mg/L)**
Solids, Total Dissolved	5,370

SS61-MW21

Analyte	Result (µg/L)
Benzene	176
Analyte	**Result (mg/L)**
Solids, Total Dissolved	5,620

SS61-MW23

Analyte	Result (mg/L)
Solids, Total Dissolved	5,200

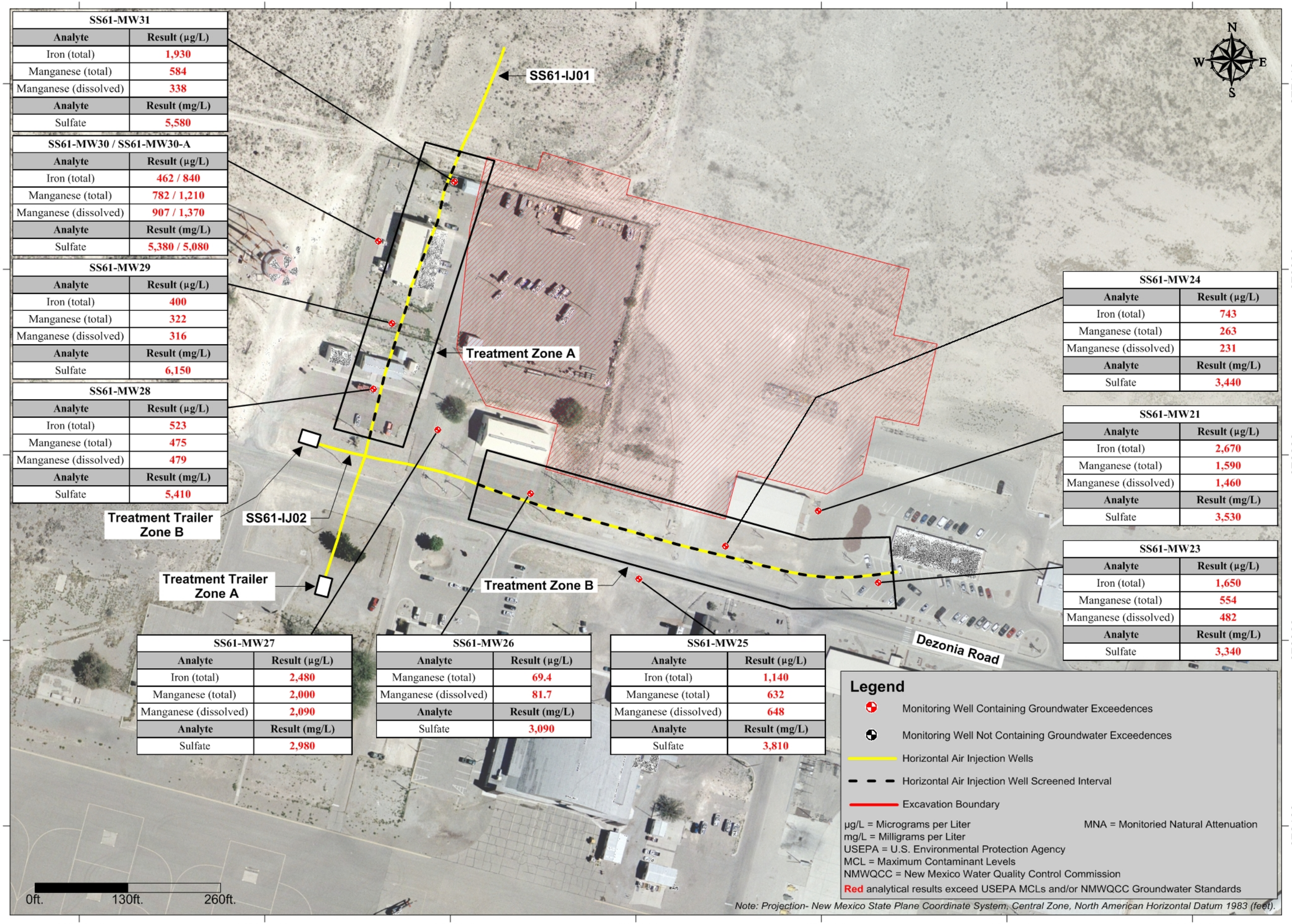
Site SS-61
2013 Annual Performance Monitoring
Progress Report
Holloman Air Force Base, New Mexico

Figure 5-3

Groundwater
Analytical Results Above Action Levels
[VOC, SVOC, TPH, and TDS]
(April 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:	DRAWING NO:
9100133	1" = 130'	5/01/2013	dtm	Fig. 5-3

bhate ENVIRONMENT INFRASTRUCTURE



SS61-MW31	
Analyte	Result (µg/L)
Iron (total)	1,930
Manganese (total)	584
Manganese (dissolved)	338
Analyte	Result (mg/L)
Sulfate	5,580

SS61-MW30 / SS61-MW30-A	
Analyte	Result (µg/L)
Iron (total)	462 / 840
Manganese (total)	782 / 1,210
Manganese (dissolved)	907 / 1,370
Analyte	Result (mg/L)
Sulfate	5,380 / 5,080

SS61-MW29	
Analyte	Result (µg/L)
Iron (total)	400
Manganese (total)	322
Manganese (dissolved)	316
Analyte	Result (mg/L)
Sulfate	6,150

SS61-MW28	
Analyte	Result (µg/L)
Iron (total)	523
Manganese (total)	475
Manganese (dissolved)	479
Analyte	Result (mg/L)
Sulfate	5,410

SS61-MW24	
Analyte	Result (µg/L)
Iron (total)	743
Manganese (total)	263
Manganese (dissolved)	231
Analyte	Result (mg/L)
Sulfate	3,440

SS61-MW21	
Analyte	Result (µg/L)
Iron (total)	2,670
Manganese (total)	1,590
Manganese (dissolved)	1,460
Analyte	Result (mg/L)
Sulfate	3,530

SS61-MW23	
Analyte	Result (µg/L)
Iron (total)	1,650
Manganese (total)	554
Manganese (dissolved)	482
Analyte	Result (mg/L)
Sulfate	3,340

SS61-MW27	
Analyte	Result (µg/L)
Iron (total)	2,480
Manganese (total)	2,000
Manganese (dissolved)	2,090
Analyte	Result (mg/L)
Sulfate	2,980

SS61-MW26	
Analyte	Result (µg/L)
Manganese (total)	69.4
Manganese (dissolved)	81.7
Analyte	Result (mg/L)
Sulfate	3,090

SS61-MW25	
Analyte	Result (µg/L)
Iron (total)	1,140
Manganese (total)	632
Manganese (dissolved)	648
Analyte	Result (mg/L)
Sulfate	3,810

Legend

- Monitoring Well Containing Groundwater Exceedences
- Monitoring Well Not Containing Groundwater Exceedences
- Horizontal Air Injection Wells
- Horizontal Air Injection Well Screened Interval
- Excavation Boundary

µg/L = Micrograms per Liter
mg/L = Milligrams per Liter
USEPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Levels
NMWQCC = New Mexico Water Quality Control Commission
MNA = Monitoried Natural Attenuation
Red analytical results exceed USEPA MCLs and/or NMWQCC Groundwater Standards

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

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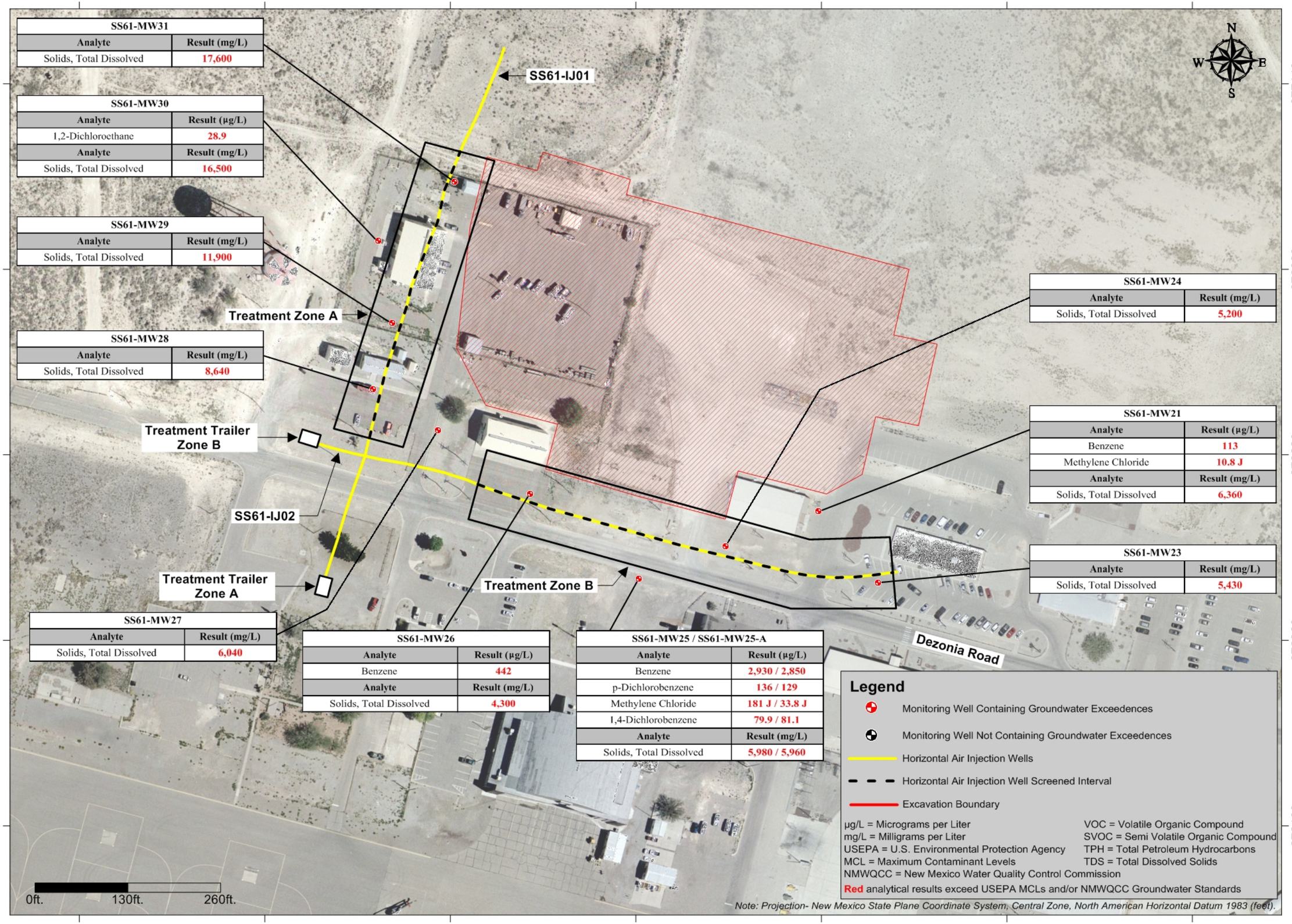
Figure 5-4

Groundwater Analytical Results Above Action Levels [MNA Parameters] (April 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:	DRAWING NO:
9100133	1" = 130'	5/01/2013	dtm	Fig. 5-4

bhate ENVIRONMENT INFRASTRUCTURE



SS61-MW31

Analyte	Result (mg/L)
Solids, Total Dissolved	17,600

SS61-MW30

Analyte	Result (µg/L)
1,2-Dichloroethane	28.9
Analyte	**Result (mg/L)**
Solids, Total Dissolved	16,500

SS61-MW29

Analyte	Result (mg/L)
Solids, Total Dissolved	11,900

SS61-MW28

Analyte	Result (mg/L)
Solids, Total Dissolved	8,640

SS61-MW24

Analyte	Result (mg/L)
Solids, Total Dissolved	5,200

SS61-MW21

Analyte	Result (µg/L)
Benzene	113
Methylene Chloride	10.8 J
Analyte	**Result (mg/L)**
Solids, Total Dissolved	6,360

SS61-MW23

Analyte	Result (mg/L)
Solids, Total Dissolved	5,430

SS61-MW27

Analyte	Result (mg/L)
Solids, Total Dissolved	6,040

SS61-MW26

Analyte	Result (µg/L)
Benzene	442
Analyte	**Result (mg/L)**
Solids, Total Dissolved	4,300

SS61-MW25 / SS61-MW25-A

Analyte	Result (µg/L)
Benzene	2,930 / 2,850
p-Dichlorobenzene	136 / 129
Methylene Chloride	181 J / 33.8 J
1,4-Dichlorobenzene	79.9 / 81.1
Analyte	**Result (mg/L)**
Solids, Total Dissolved	5,980 / 5,960

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2013 Annual Performance Monitoring
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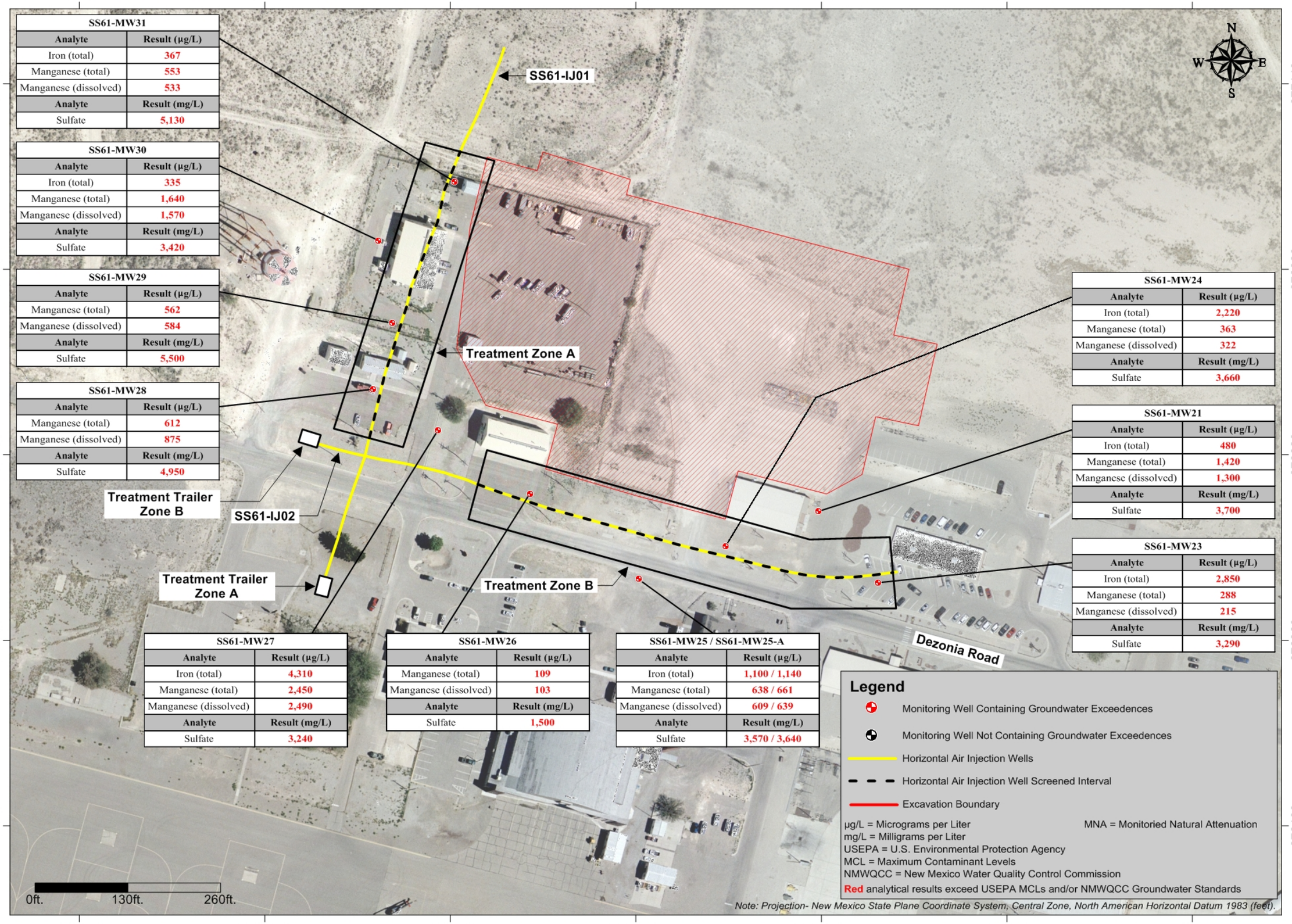
Figure 5-5

Groundwater Analytical Results Above Action Levels [VOC, SVOC, TPH, and TDS] (July 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:	DRAWING NO:
9100133	1" = 130'	8/13/2013	dtm	Fig. 5-5

bhate ENVIRONMENT INFRASTRUCTURE



SS61-MW31

Analyte	Result (µg/L)
Iron (total)	367
Manganese (total)	553
Manganese (dissolved)	533
Analyte	**Result (mg/L)**
Sulfate	5,130

SS61-MW30

Analyte	Result (µg/L)
Iron (total)	335
Manganese (total)	1,640
Manganese (dissolved)	1,570
Analyte	**Result (mg/L)**
Sulfate	3,420

SS61-MW29

Analyte	Result (µg/L)
Manganese (total)	562
Manganese (dissolved)	584
Analyte	**Result (mg/L)**
Sulfate	5,500

SS61-MW28

Analyte	Result (µg/L)
Manganese (total)	612
Manganese (dissolved)	875
Analyte	**Result (mg/L)**
Sulfate	4,950

SS61-MW24

Analyte	Result (µg/L)
Iron (total)	2,220
Manganese (total)	363
Manganese (dissolved)	322
Analyte	**Result (mg/L)**
Sulfate	3,660

SS61-MW21

Analyte	Result (µg/L)
Iron (total)	480
Manganese (total)	1,420
Manganese (dissolved)	1,300
Analyte	**Result (mg/L)**
Sulfate	3,700

SS61-MW23

Analyte	Result (µg/L)
Iron (total)	2,850
Manganese (total)	288
Manganese (dissolved)	215
Analyte	**Result (mg/L)**
Sulfate	3,290

SS61-MW27

Analyte	Result (µg/L)
Iron (total)	4,310
Manganese (total)	2,450
Manganese (dissolved)	2,490
Analyte	**Result (mg/L)**
Sulfate	3,240

SS61-MW26

Analyte	Result (µg/L)
Manganese (total)	109
Manganese (dissolved)	103
Analyte	**Result (mg/L)**
Sulfate	1,500

SS61-MW25 / SS61-MW25-A

Analyte	Result (µg/L)
Iron (total)	1,100 / 1,140
Manganese (total)	638 / 661
Manganese (dissolved)	609 / 639
Analyte	**Result (mg/L)**
Sulfate	3,570 / 3,640

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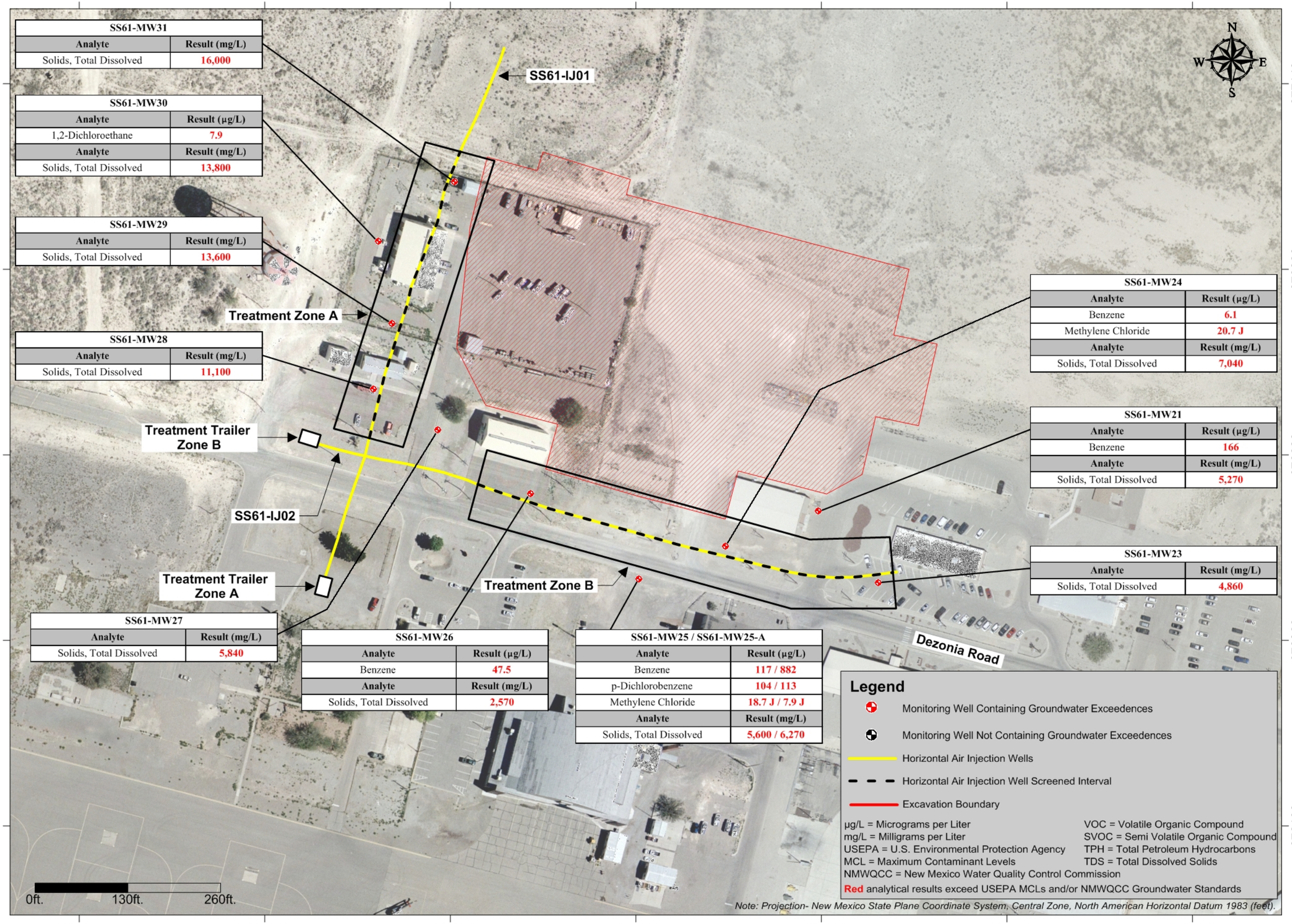
Figure 5-6

Groundwater Analytical Results Above Action Levels [MNA Parameters] (July 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:	DRAWING NO:
9100133	1" = 130'	8/13/2013	dtm	Fig. 5-6

bhate ENVIRONMENT INFRASTRUCTURE



SS61-MW31	
Analyte	Result (mg/L)
Solids, Total Dissolved	16,000

SS61-MW30	
Analyte	Result (µg/L)
1,2-Dichloroethane	7.9
Analyte	Result (mg/L)
Solids, Total Dissolved	13,800

SS61-MW29	
Analyte	Result (mg/L)
Solids, Total Dissolved	13,600

SS61-MW28	
Analyte	Result (mg/L)
Solids, Total Dissolved	11,100

SS61-MW24	
Analyte	Result (µg/L)
Benzene	6.1
Methylene Chloride	20.7 J
Analyte	Result (mg/L)
Solids, Total Dissolved	7,040

SS61-MW21	
Analyte	Result (µg/L)
Benzene	166
Analyte	Result (mg/L)
Solids, Total Dissolved	5,270

SS61-MW23	
Analyte	Result (mg/L)
Solids, Total Dissolved	4,860

SS61-MW27	
Analyte	Result (mg/L)
Solids, Total Dissolved	5,840

SS61-MW26	
Analyte	Result (µg/L)
Benzene	47.5
Analyte	Result (mg/L)
Solids, Total Dissolved	2,570

SS61-MW25 / SS61-MW25-A	
Analyte	Result (µg/L)
Benzene	117 / 882
p-Dichlorobenzene	104 / 113
Methylene Chloride	18.7 J / 7.9 J
Analyte	Result (mg/L)
Solids, Total Dissolved	5,600 / 6,270

Legend

- Monitoring Well Containing Groundwater Exceedences
- Monitoring Well Not Containing Groundwater Exceedences
- Horizontal Air Injection Wells
- Horizontal Air Injection Well Screened Interval
- Excavation Boundary

µg/L = Micrograms per Liter
mg/L = Milligrams per Liter
USEPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Levels
NMWQCC = New Mexico Water Quality Control Commission
VOC = Volatile Organic Compound
SVOC = Semi Volatile Organic Compound
TPH = Total Petroleum Hydrocarbons
TDS = Total Dissolved Solids
Red analytical results exceed USEPA MCLs and/or NMWQCC Groundwater Standards

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

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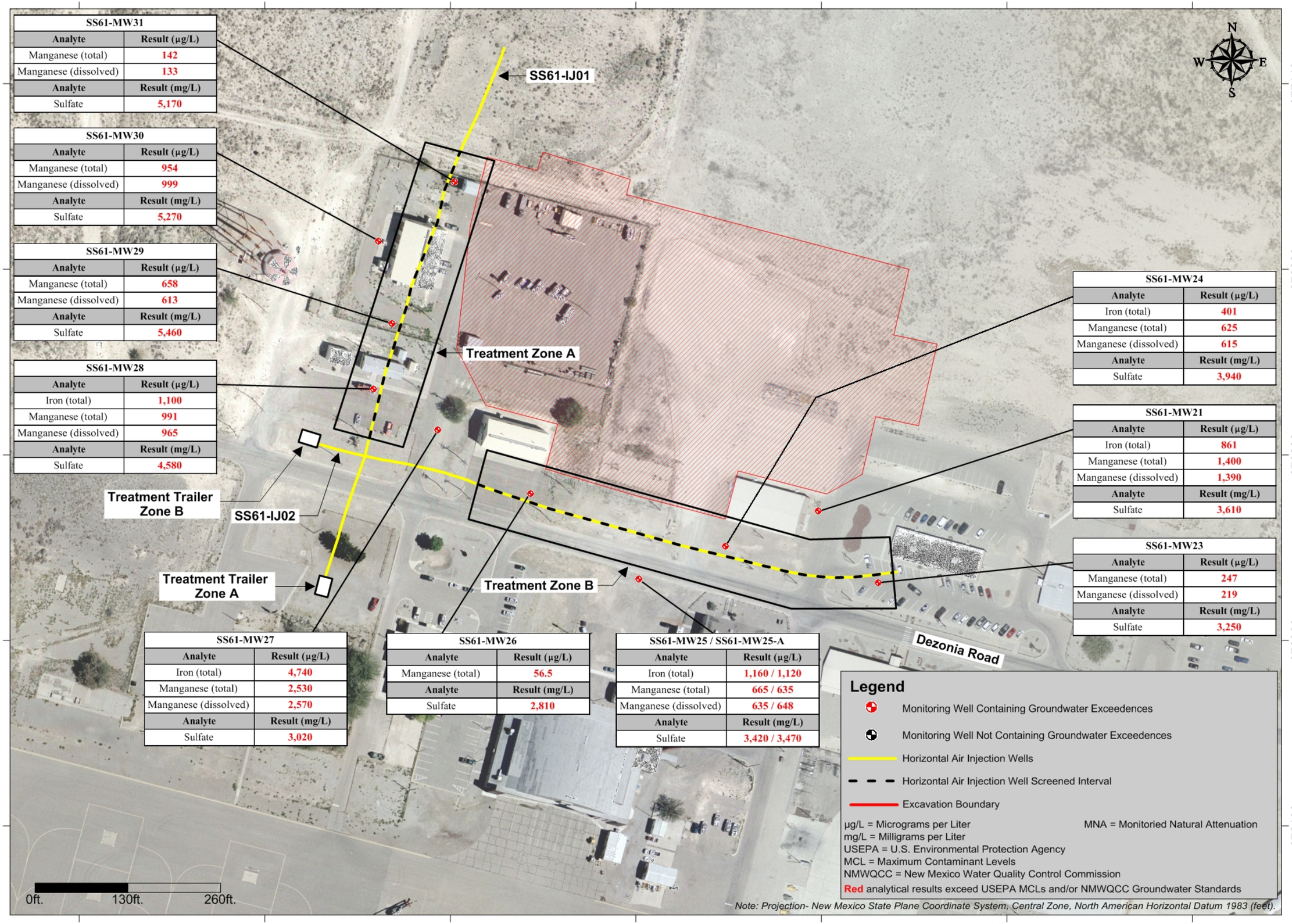
Figure 5-7

Groundwater Analytical Results Above Action Levels [VOC, SVOC, TPH, and TDS] (October 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:	DRAWING NO:
9100133	1" = 130'	12/06/2013	dtm	Fig. 5-7

bhate ENVIRONMENT INFRASTRUCTURE



SS61-MW31

Analyte	Result (µg/L)
Manganese (total)	142
Manganese (dissolved)	133
Analyte	**Result (mg/L)**
Sulfate	5,170

SS61-MW30

Analyte	Result (µg/L)
Manganese (total)	954
Manganese (dissolved)	999
Analyte	**Result (mg/L)**
Sulfate	5,270

SS61-MW29

Analyte	Result (µg/L)
Manganese (total)	658
Manganese (dissolved)	613
Analyte	**Result (mg/L)**
Sulfate	5,460

SS61-MW28

Analyte	Result (µg/L)
Iron (total)	1,100
Manganese (total)	991
Manganese (dissolved)	965
Analyte	**Result (mg/L)**
Sulfate	4,580

SS61-MW24

Analyte	Result (µg/L)
Iron (total)	401
Manganese (total)	625
Manganese (dissolved)	615
Analyte	**Result (mg/L)**
Sulfate	3,940

SS61-MW21

Analyte	Result (µg/L)
Iron (total)	861
Manganese (total)	1,400
Manganese (dissolved)	1,390
Analyte	**Result (mg/L)**
Sulfate	3,610

SS61-MW23

Analyte	Result (µg/L)
Manganese (total)	247
Manganese (dissolved)	219
Analyte	**Result (mg/L)**
Sulfate	3,250

SS61-MW27

Analyte	Result (µg/L)
Iron (total)	4,740
Manganese (total)	2,530
Manganese (dissolved)	2,570
Analyte	**Result (mg/L)**
Sulfate	3,020

SS61-MW26

Analyte	Result (µg/L)
Manganese (total)	56.5
Analyte	**Result (mg/L)**
Sulfate	2,810

SS61-MW25 / SS61-MW25-A

Analyte	Result (µg/L)
Iron (total)	1,160 / 1,120
Manganese (total)	665 / 635
Manganese (dissolved)	635 / 648
Analyte	**Result (mg/L)**
Sulfate	3,420 / 3,470

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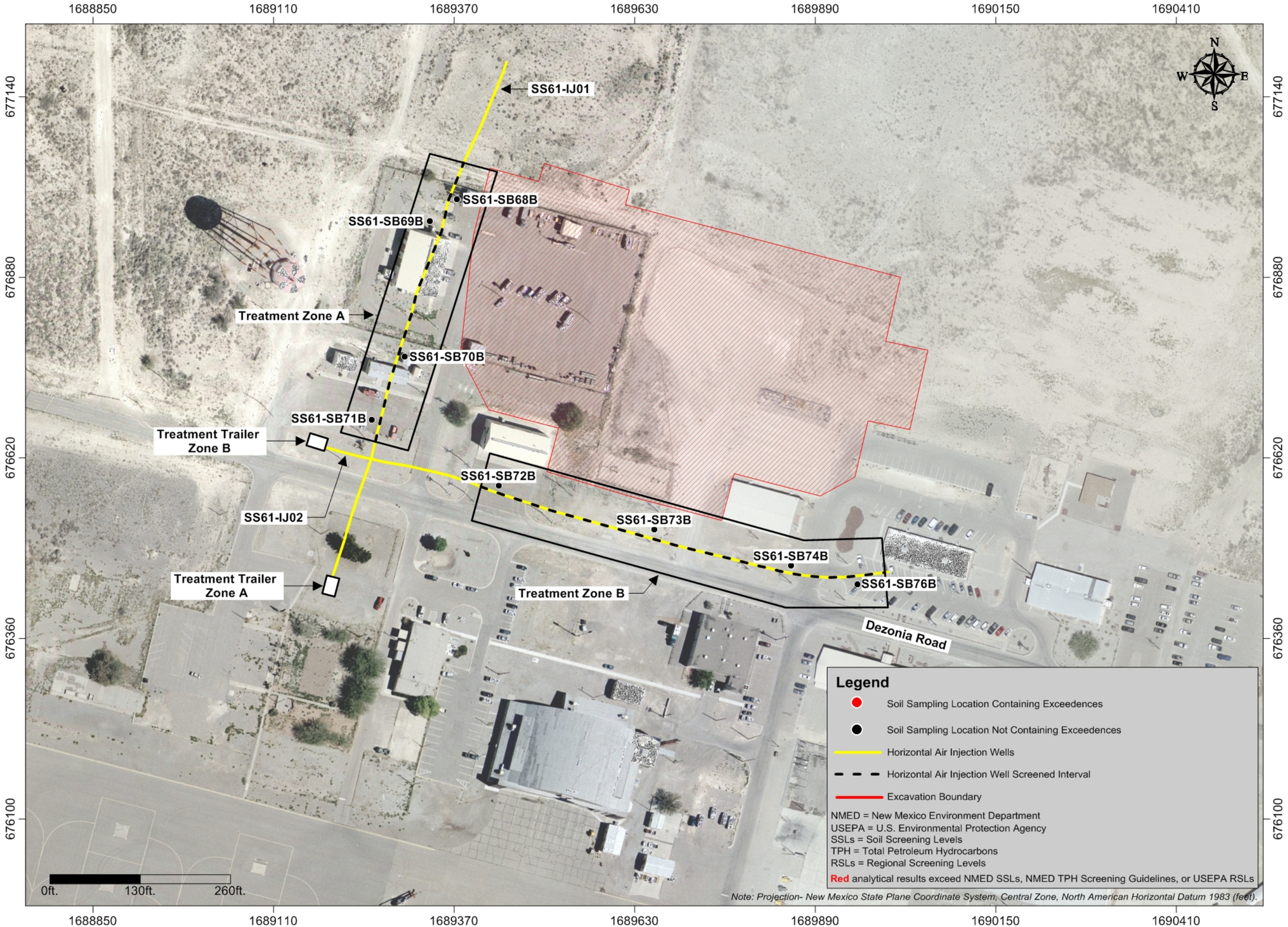
Figure 5-8

Groundwater Analytical Results Above Action Levels [MNA Parameters] (October 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:	DRAWING NO:
9100133	1" = 130'	12/06/2013	dtm	Fig. 5-8

bhate ENVIRONMENT INFRASTRUCTURE



Site SS-61
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Figure 6-1

Soil Boring Locations (April 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:	DRAWING NO:
9100133	1" = 130'	4/30/2013	dtm	Fig. 6-1

bhate ENVIRONMENT INFRASTRUCTURE

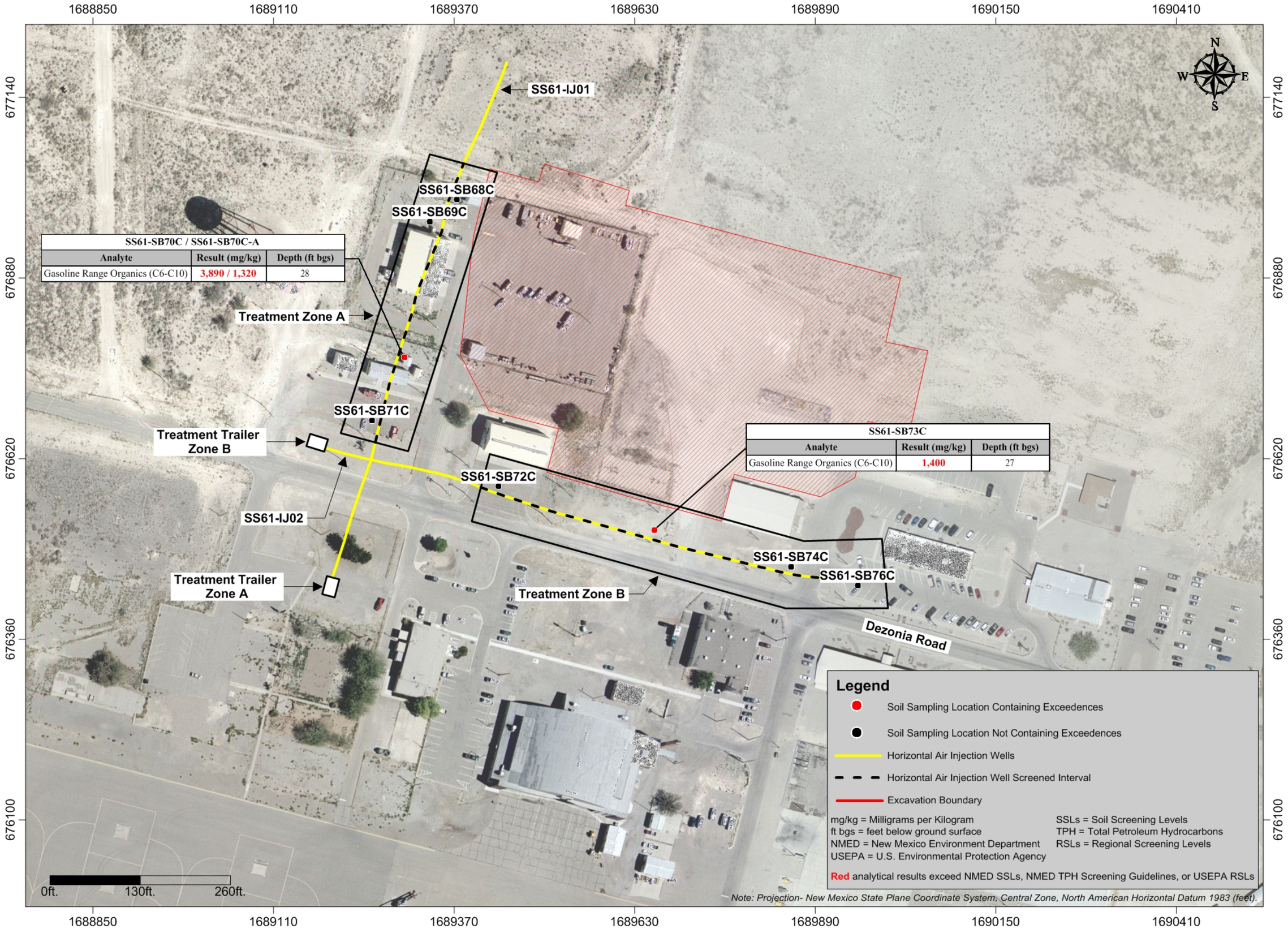

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Figure 6-2

Soil Analytical Results Above Action Levels (October 2013)

PROJECT NO.	SCALE	DATE	DRAWN BY:	DRAWING NO:
9100133	1" = 130'	12/06/2013	dtm	Fig. 6-2

bhate ENVIRONMENT INFRASTRUCTURE

Figure 7-1

Benzene Concentration Trends in SS-61 Monitoring Wells

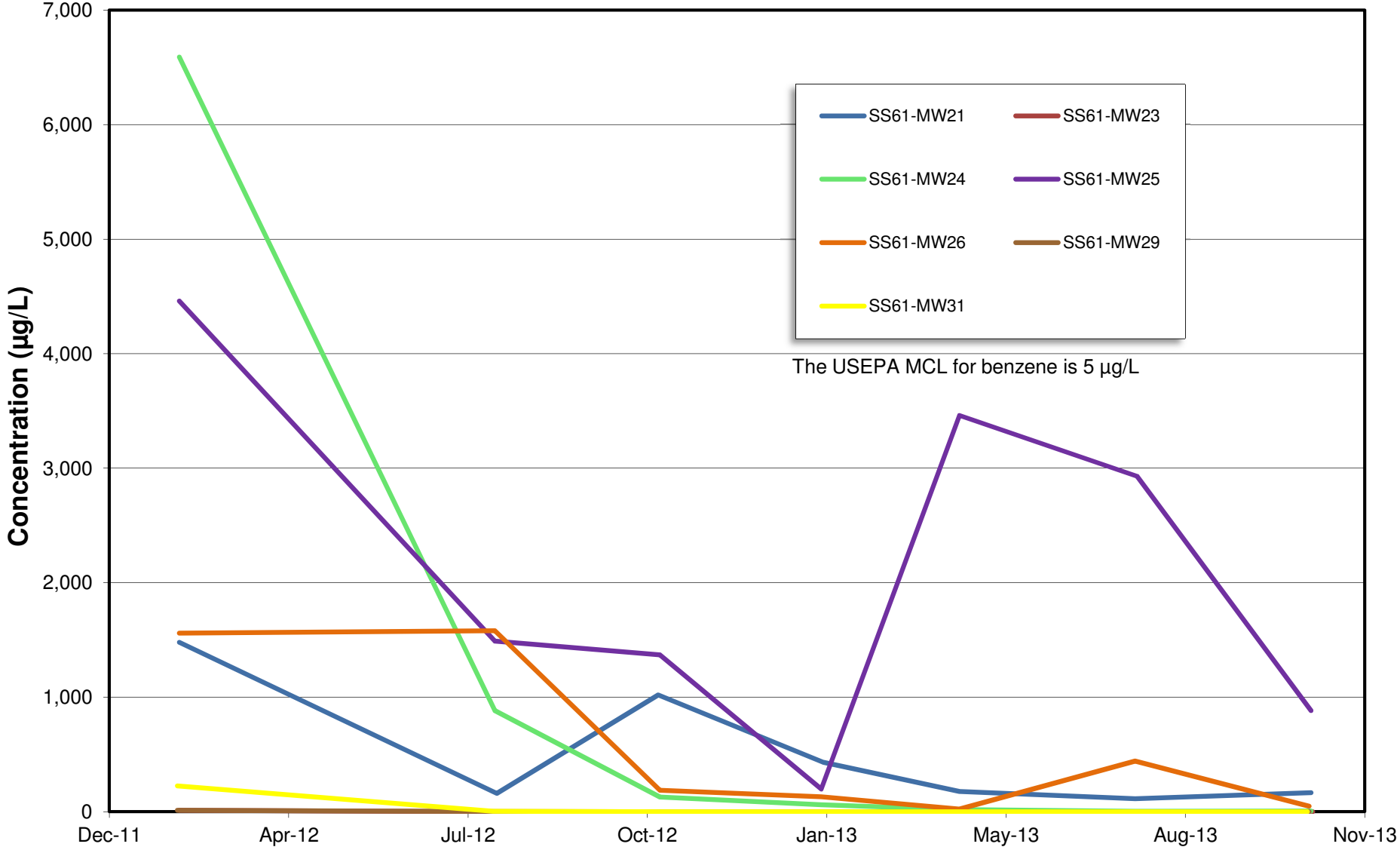


Figure 7-2

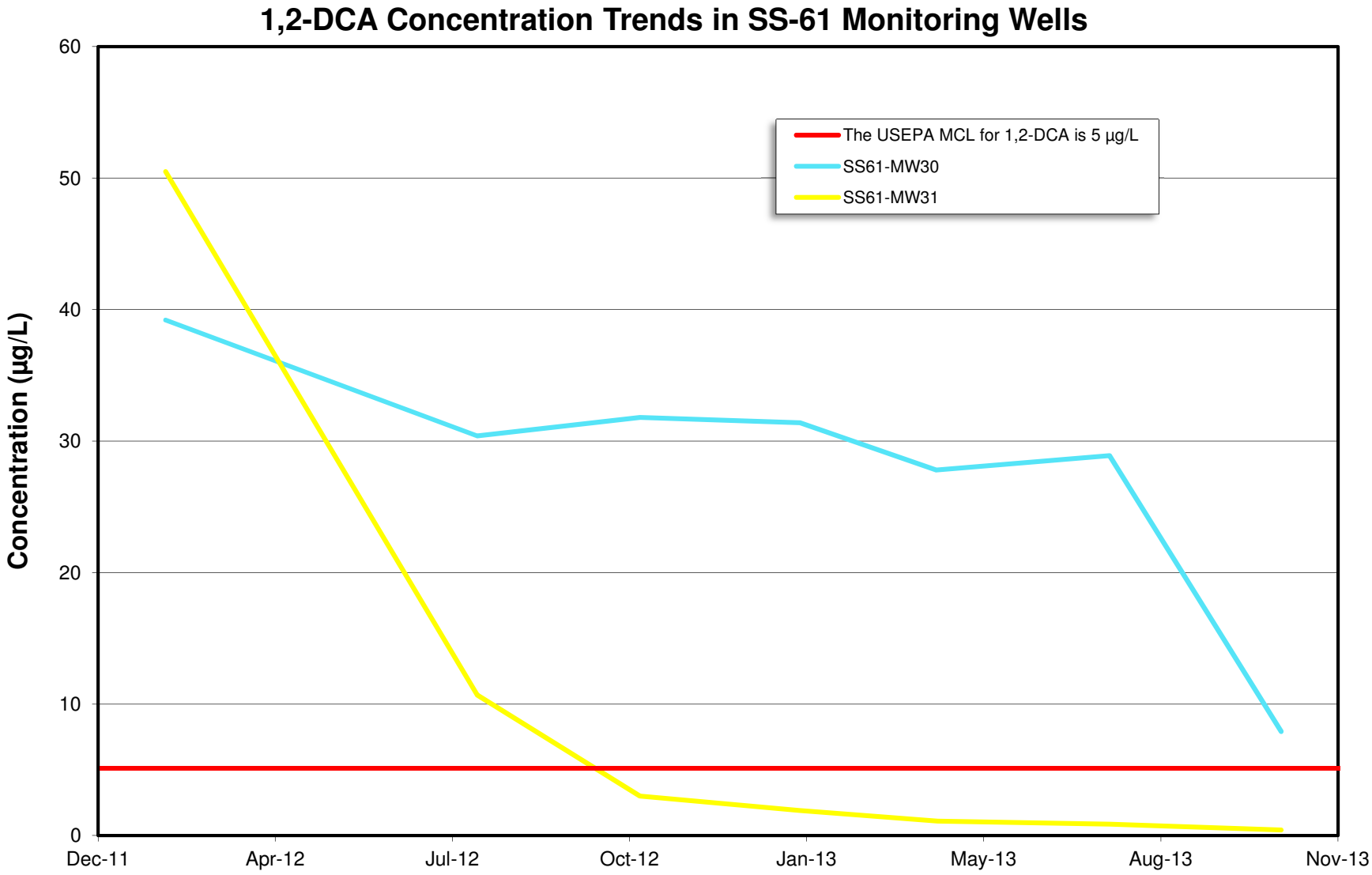

1,2-DCA Concentration Trends in SS-61 Monitoring Wells
Concentration (µg/L)
60
50
40
30
20
10
0
Dec-11
Apr-12
Jul-12
Oct-12
Jan-13
May-13
Aug-13
Nov-13
The USEPA MCL for 1,2-DCA is 5 µg/L
SS61-MW30
SS61-MW31

Figure 7-3

Ethylbenzne Concentration Trends in SS-61 Monitoring Wells

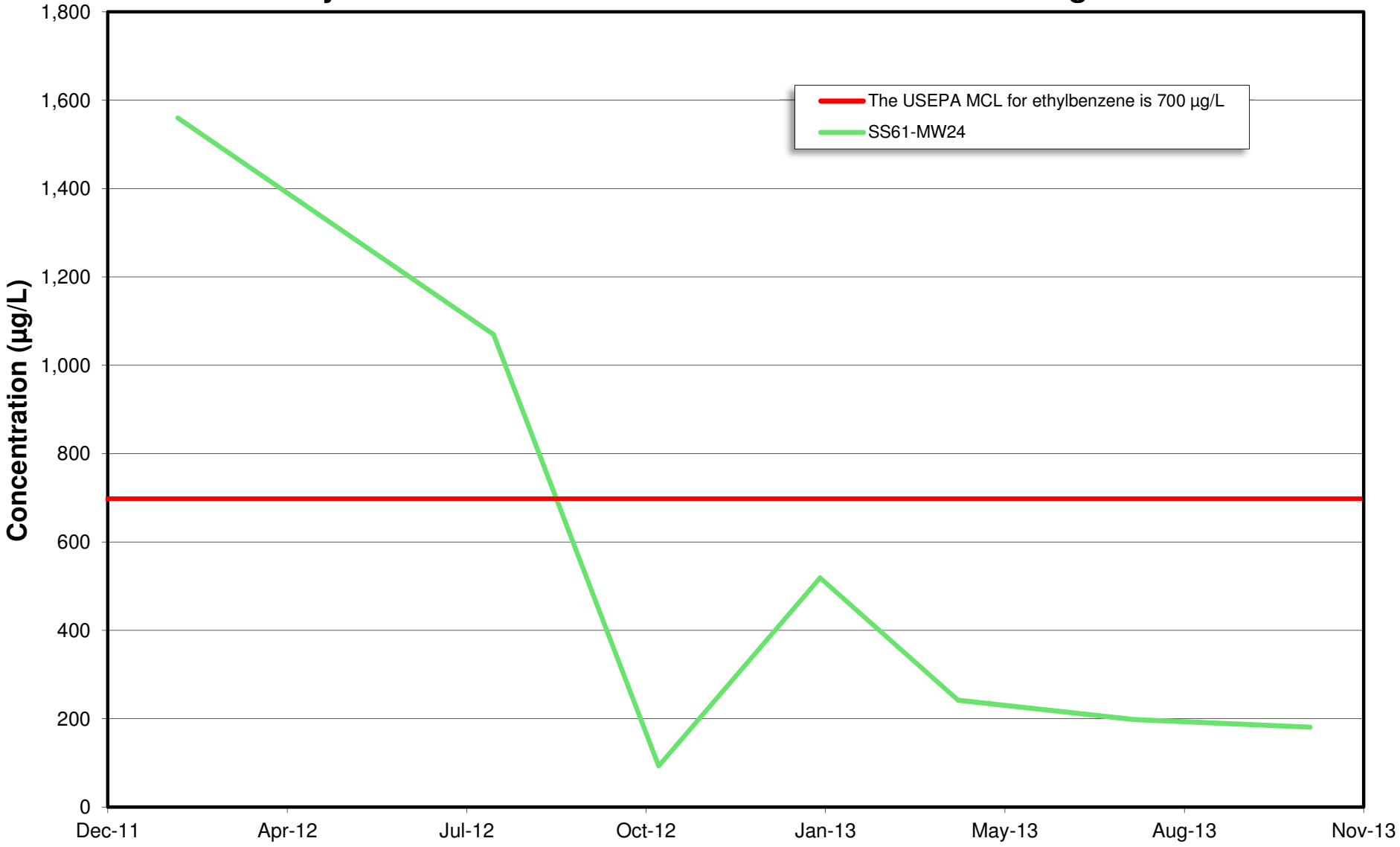


Figure 7-4

Phenol Concentration Trends in SS-61 Monitoring Wells

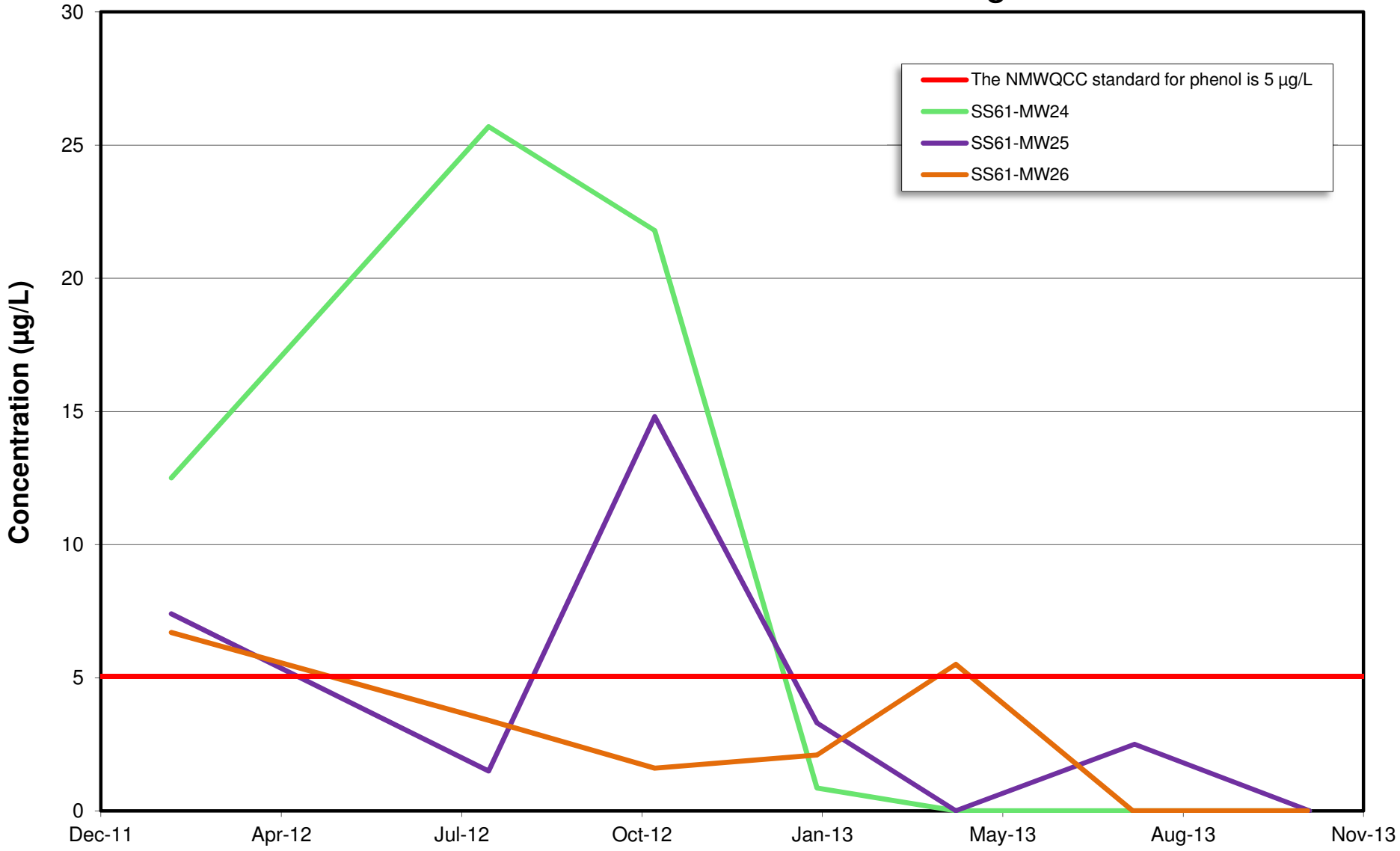
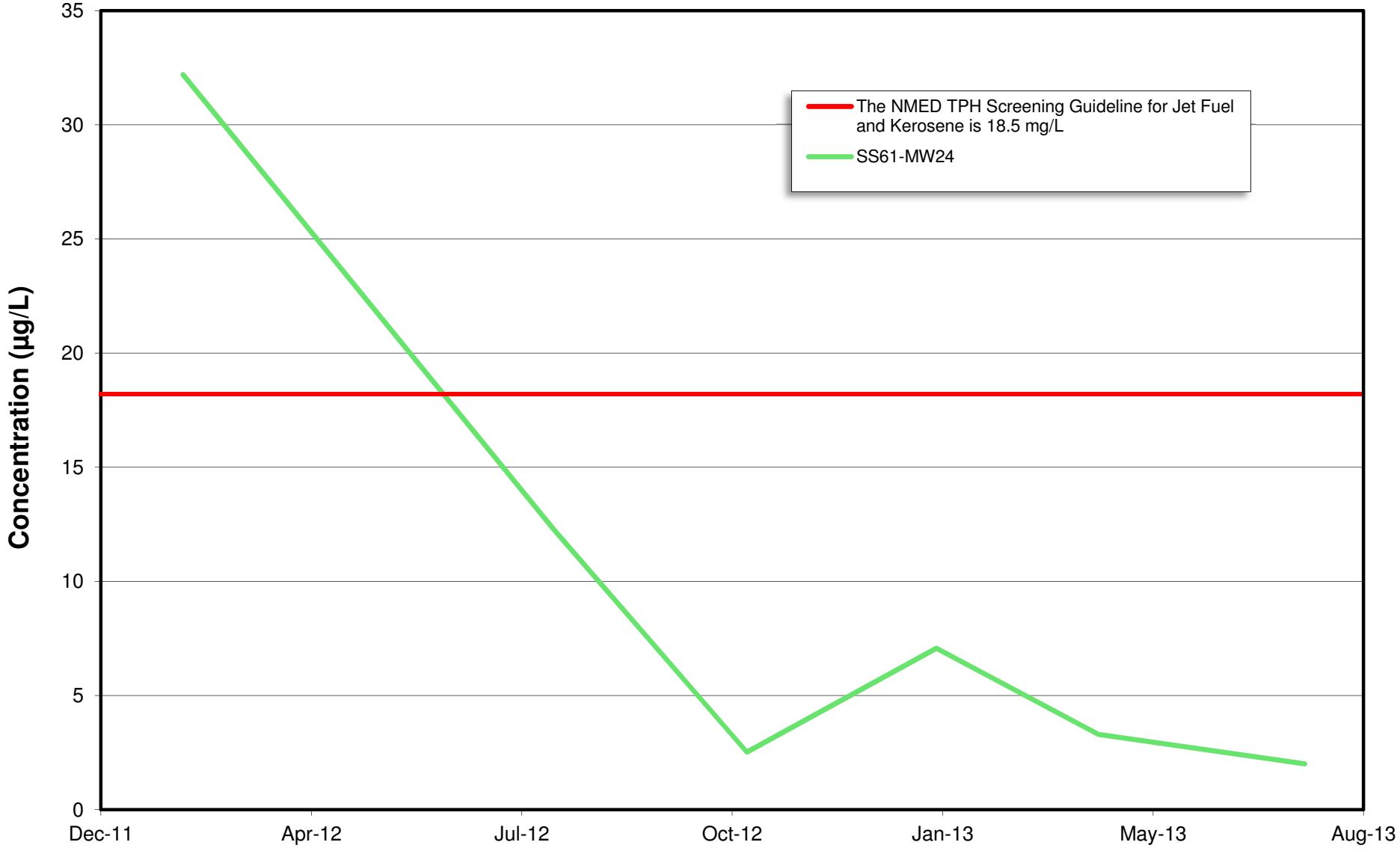


Figure 7-5
Gasoline Range Organics Concentration Trends in SS-61 Monitoring Wells



TABLES

Table 4-1
Summary of Soil Boring Locations and Sample Intervals (Second Semiannual, April 2013)
Spill Site SS-61 Performance Monitoring
Holloman Air Force Base, New Mexico

Soil Boring Number	Location	Northing	Easting	Total Depth (ft)	Sample Depths for Chemical Analysis (ft bgs)	Laboratory Analysis
SS61-SB68B	Treatment Zone A	676992.8	1689374.1	30	25 - 27	VOCs, SVOCs, TPH
SS61-SB69B	Treatment Zone A	676961.0	1689335.0	30	28 - 30	VOCs, SVOCs, TPH
SS61-SB70B	Treatment Zone A	676765.6	1689298.4	30	26 - 28	VOCs, SVOCs, TPH
SS61-SB71B	Treatment Zone A	676674.8	1689251.6	30	26 - 28	VOCs, SVOCs, TPH
SS61-SB72B	Treatment Zone B	676579.9	1689434.1	30	27 - 29	VOCs, SVOCs, TPH
SS61-SB73B	Treatment Zone B	676516.7	1689658.3	30	25 - 27	VOCs, SVOCs, TPH
SS61-SB74B	Treatment Zone B	676464.5	1689855.3	30	26 - 28	VOCs, SVOCs, TPH
SS61-SB76B	Treatment Zone B	676437.6	1689951.2	30	28 - 30	VOCs, SVOCs, TPH

Notes:
VOCs = Volatile Organic Compounds
SVOCs = Semi-Volatile Organic Compounds
TPH = Total Petroleum Hydrocarbons (Gasoline Range Organics, Diesel Range Organics and Oil Range Organics)
ft bgs = feet below ground surface
Northing and Easting coordinates presented in New Mexico State Plane Coordinate System, Central Zone, North American Horizontal Datum 1983 (ft)

Table 4-2
Summary of Soil Boring Locations and Sample Intervals (Third Semiannual, October 2013)
Spill Site SS-61 Performance Monitoring
Holloman Air Force Base, New Mexico

Soil Boring Number	Location	Northing	Easting	Total Depth (ft)	Sample Depths for Chemical Analysis (ft bgs)	Laboratory Analysis
SS61-SB68C	Treatment Zone A	676992.8	1689374.1	30	25 - 27	VOCs, SVOCs, TPH
SS61-SB69C	Treatment Zone A	676961.0	1689335.0	30	28 - 30	VOCs, SVOCs, TPH
SS61-SB70C	Treatment Zone A	676765.6	1689298.4	30	26 - 28	VOCs, SVOCs, TPH
SS61-SB71C	Treatment Zone A	676674.8	1689251.6	30	26 - 28	VOCs, SVOCs, TPH
SS61-SB72C	Treatment Zone B	676579.9	1689434.1	30	27 - 29	VOCs, SVOCs, TPH
SS61-SB73C	Treatment Zone B	676516.7	1689658.3	30	25 - 27	VOCs, SVOCs, TPH
SS61-SB74C	Treatment Zone B	676464.5	1689855.3	30	26 - 28	VOCs, SVOCs, TPH
SS61-SB76C	Treatment Zone B	676437.6	1689951.2	30	28 - 30	VOCs, SVOCs, TPH

Notes:
VOCs = Volatile Organic Compounds
SVOCs = Semi-Volatile Organic Compounds
TPH = Total Petroleum Hydrocarbons (Gasoline Range Organics, Diesel Range Organics and Oil Range Organics)
ft bgs = feet below ground surface
Northing and Easting coordinates presented in New Mexico State Plane Coordinate System, Central Zone, North American Horizontal Datum 1983 (ft)

Table 4-3
Groundwater Elevation Summary (2012)
Spill Site SS-61 Performance Monitoring
Holloman Air Force Base, New Mexico

Well	Northing	Easting	Elevation TOC (ft above msl)	Quarter 3 (January 2013)		Quarter 4 (April 2013)		Quarter 5 (July 2013)		Quarter 6 (October 2013)	
				DTW from TOC (ft below TOC)	Groundwater Elevation January 21, 2013 (ft above msl)	DTW from TOC (ft below TOC)	Groundwater Elevation April 10, 2013 (ft above msl)	DTW from TOC (ft below TOC)	Groundwater Elevation July 16, 2013 (ft above msl)	DTW from TOC (ft below TOC)	Groundwater Elevation October 21, 2013 (ft above msl)
SS61-MW02	676701.31	1690166.87	4105.20	28.48	4076.72	28.45	4076.75	28.24	4076.96	27.05	4078.15
SS61-MW04	676533.93	1689639.50	4095.12	23.38	4071.74	24.20	4070.92	22.96	4072.16	20.21	4074.91
SS61-MW05	676415.18	1689763.24	4097.68	23.81	4073.87	24.04	4073.64	23.61	4074.07	20.85	4076.83
SS61-MW06	676523.47	1689677.45	4098.30	24.50	4073.80	25.58	4072.72	24.02	4074.28	21.09	4077.21
SS61-MW07	676542.96	1688892.51	4095.36	20.33	4075.03	20.51	4074.85	19.99	4075.37	18.41	4076.95
SS61-MW08	676468.24	1689333.93	4093.49	19.89	4073.60	20.15	4073.34	17.68	4075.81	16.50	4076.99
SS61-MW09	676227.99	1689430.35	4096.53	20.19	4076.34	20.49	4076.04	19.62	4076.91	16.28	4080.25
SS61-MW10	676022.53	1689610.23	4093.85	16.39	4077.46	16.80	4077.05	16.65	4077.20	NA	NA
SS61-MW12	676157.39	1689203.45	4092.55	16.55	4076.00	16.91	4075.64	15.54	4077.01	13.43	4079.12
SS61-MW13	676941.00	1688905.20	4093.69	18.28	4075.41	18.47	4075.22	17.34	4076.35	16.93	4076.76
SS61-MW15	676042.10	1689590.40	4093.90	16.11	4077.79	16.91	4076.99	16.32	4077.58	NA	NA
SS61-MW16	676136.30	1689397.20	4093.77	17.25	4076.52	17.60	4076.17	16.75	4077.02	13.88	4079.89
SS61-MW18	676586.71	1689583.33	4093.41	NA	NA	NA	NA	NA	NA	NA	NA
SS61-MW19	676580.38	1689609.82	4093.49	NA	NA	NA	NA	NA	NA	NA	NA
SS61-MW21	676541.41	1689885.52	4095.92	22.23	4073.69	22.07	4073.85	21.96	4073.96	19.74	4076.18
SS61-MW22	676527.64	1689873.19	4095.62	22.17	4073.45	22.08	4073.54	21.91	4073.71	19.29	4076.33
SS61-MW23	676440.77	1689969.44	4095.92	21.83	4074.09	21.63	4074.29	21.54	4074.38	19.18	4076.74
SS61-MW24	676491.65	1689755.89	4093.61	21.20	4072.41	22.76	4070.85	20.63	4072.98	17.92	4075.69
SS61-MW25	676446.30	1689634.23	4091.87	18.93	4072.94	19.59	4072.28	18.53	4073.34	15.66	4076.21
SS61-MW26	676565.33	1689482.09	4093.18	21.61	4071.57	22.24	4070.94	18.51	4074.67	18.51	4074.67
SS61-MW27	676654.60	1689352.66	4092.61	20.22	4072.39	22.97	4069.64	19.73	4072.88	19.24	4073.37
SS61-MW28	676712.20	1689261.94	4093.61	20.84	4072.77	21.85	4071.76	20.70	4072.91	19.55	4074.06
SS61-MW29	676804.37	1689288.51	4095.87	22.81	4073.06	23.74	4072.13	22.68	4073.19	21.48	4074.39
SS61-MW30	676919.61	1689269.06	4097.61	24.35	4073.26	24.49	4073.12	23.84	4073.77	22.98	4074.63
SS61-MW31	677002.60	1689375.93	4097.42	23.89	4073.53	24.95	4072.47	23.77	4073.65	22.77	4074.65
MW-29-04	677064.93	1689179.00	4100.64	24.83	4075.81	24.90	4075.74	24.19	4076.45	23.52	4077.12
SS61-TMW84	676048.77	1689623.51	4094.40	19.15	4075.25	19.55	4074.85	19.27	4075.13	NA	NA

Notes:
NA = Not applicable (Abandoned during SS-61 Excavation Operations)
TOC = Top of Casing
DTW = Depth to Water
ft = feet
msl = mean sea level
Northing and Easting coordinates presented in New Mexico State Plane Coordinate System, Central Zone, North American Horizontal Datum 1983 (ft)

Table 5-1
Quarter 3 Sampling Event Groundwater Analytical Results (January 2013)
Spill Site SS-61 Performance Monitoring
Holloman Air Force Base, New Mexico

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			SS61-MW21			SS61-MW21-A			SS61-MW23			SS61-MW24			SS61-MW25			SS61-MW26		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background [3]	Dissolved Metals in Groundwater UTL [4]	Total Metals in Groundwater UTL [4]	FA1176-5			FA1176-7			FA1176-3			FA1176-1			FA1125-3			FA1125-13		
Date Sampled:						1/24/2013			1/24/2013			1/23/2013			1/23/2013			1/23/2013			1/23/2013		
Treatment Zone:						Zone B			Zone B			Zone B			Zone B			Zone B			Zone B		
Analyte (Method)						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (USEPA SW846 8260B)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Benzene	10	5	NV	NV	NV	**432**		J	**201**		J	0.21	U		**61**			**197**			**131**		
Bromobenzene	NV	NV	NV	NV	NV	1.1	U		0.44	U		0.22	U		1.1	U		0.92	J		0.55	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	3.0	J	J	2.0		J	0.21	U		7.0			1.8	J		0.80	J	
tert-Butylbenzene	NV	NV	NV	NV	NV	3.7	J		2.8			0.68	J		7.5			7.1			1.7	J	
Chlorobenzene	NV	100	NV	NV	NV	1.0	U		0.40	U		0.20	U		1.0	U		16.8			0.50	U	
Chloroform	100	NV	NV	NV	NV	1.3	U		0.53	U		0.26	U		1.3	U		0.66	U		0.66	U	
Carbon disulfide	NV	NV	NV	NV	NV	2.5	U		0.99	U		0.49	U		2.5	U		1.2	U		1.2	U	
1,1-Dichloroethane	25	NV	NV	NV	NV	1.1	U		0.43	U		0.21	U		1.1	U		2.6			0.54	U	
1,2-Dichloroethane	10	5	NV	NV	NV	1.1	U		0.44	U		0.22	U		1.1	U		0.56	U		0.56	U	
m-Dichlorobenzene	NV	NV	NV	NV	NV	2.5	J		2.7			0.25	U		1.3	U		96.2			0.64	U	
o-Dichlorobenzene	NV	600	NV	NV	NV	9.8			8.8			0.22	U		1.6	J		340			0.54	U	
p-Dichlorobenzene	NV	75	NV	NV	NV	3.7	J		2.9			0.20	U		1.0	U		**123**			0.50	U	
Ethylbenzene	750	700	NV	NV	NV	216		J	142		J	0.29	U		519			1.6	J		23.2		
Isopropylbenzene	NV	NV	NV	NV	NV	353		J	204		J	0.20	U		1,030			124			83.3		
p-Isopropyltoluene	NV	NV	NV	NV	NV	1.0	U		0.40	U		0.20	U		1.2	J		0.50	U		0.50	U	
n-Propylbenzene	NV	NV	NV	NV	NV	26.2		J	16.8		J	0.23	U		46.3			2.8			1.9	J	
1,2,4-Trimethylbenzene	NV	NV	NV	NV	NV	10.1		J	6.9		J	0.20	U		174			0.50	U		11.3		
1,3,5-Trimethylbenzene	NV	NV	NV	NV	NV	1.0	U		0.40	U		0.20	U		14.1			0.50	U		1.1	J	
Toluene	750	1,000	NV	NV	NV	29.8		J	19		J	0.20	U		28.3			0.50	U		6.2		
Trichloroethylene	100	5	NV	NV	NV	1.6	U		1.1	J		0.31	U		1.6	U		4.2			0.79	U	
m,p-Xylene	620	10,000	NV	NV	NV	52.3		J	33.4		J	0.30	U		446			0.74	U		39.1		
o-Xylene	620	10,000	NV	NV	NV	28		J	18.4		J	0.20	U		145			0.50	U		24.6		
Semi-Volatile Organic Compounds (USEPA SW846 8270D)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
2,4-Dimethylphenol	NV	NV	NV	NV	NV	0.74	U		0.74	U		0.74	U		17.9			2.9	U		3.8	J	
2-Methylphenol	NV	NV	NV	NV	NV	0.69	U		0.69	U		0.69	U		0.73	J		2.8	U		0.69	U	
Phenol	5	NV	NV	NV	NV	0.53	U		0.53	U		0.53	U		0.86	J		3.3	J		2.1	J	
1,2-Dichlorobenzene	NV	600	NV	NV	NV	7.5			8.1			0.65	U		1.5	J		169			0.65	U	
1,3-Dichlorobenzene	NV	NV	NV	NV	NV	2.3	J		2.5	J		0.75	U		0.75	U		48.6			0.75	U	
1,4-Dichlorobenzene	NV	75	NV	NV	NV	2.8	J		3.1	J		0.67	U		0.67	U		66.5			0.67	U	
Naphthalene	NV	NV	NV	NV	NV	0.61	U		0.61	U		0.61	U		1.8	J		2.4	U		0.61	U	
Total Petroleum Hydrocarbons (USEPA SW846 8015C)	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Gasoline Range Organics (C6-C10)	18.5 [6]	NV	NV	NV	NV	0.545		J	1.75		J	0.0709	J		7.07			2.47			0.75		
Diesel Range Organics (C10-C22)	18.5 [6]	NV	NV	NV	NV	0.451		J	0.259		J	0.187	J		1.4			2.05			0.334		
Oil Range Organics (>C22-C36)	18.5 [6]	NV	NV	NV	NV	0.095	U		0.095	U		0.097	U		0.095	U		0.39	U		0.095	U	
Dissolved Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Manganese	200	50 [7]	50	118.65	NV	**1,480**			**1,470**			**439**			**392**			**684**			**251**		
Total Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Iron	1,000	300 [7]	300	NV	1,306.82	**780**			**652**			144	J		**904**			**1,400**			57.8	J	
Manganese	200	50 [7]	50	NV	745.38	**1,380**			**1,400**			**498**			**400**			**704**			**250**		
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Nitrogen, Ammonia	NV	NV	NV	NV	NV	0.067	J		0.062	J		0.064	J		0.061	J		0.077	J		0.03	U	
Nitrogen, Total Kjeldahl	NV	NV	NV	NV	NV	1.0		J	0.52	J	J	2.0			0.99			3.0			2.6		
Iron, Ferrous	NV	NV	NV	NV	NV	0.26		J	0.43		J	0.071	J		0.23			0.54			0.03	U	
Iron, Ferric	NV	NV	NV	NV	NV	0.52		JU	0.22	J	J	0.073	J		0.67			0.86			0.059	U	
Hydrogen Sulfide	NV	NV	NV	NV	NV	13.6			14			0.64	J		0.50	U		15.9			1.3		
Solids, Total Dissolved	1,000	500 [7]	NV	NV	65,956.58 [8]	**5,390**			**4,890**			**4,130**			**5,130**			**5,420**			**4,330**		
BOD, 5 Day	NV	NV	NV	NV	NV	16.7		J	17.1		J	4.0	U		8.0	U		18.9			4.0	U	
Chemical Oxygen Demand	NV	NV	NV	NV	NV	44.7			52.2			5.3	U		57.1			52.2			17.4	J	
Nitrogen, Nitrate	10	10	NV	NV	NV	2.5	U		2.5	U		2.3	J		2.5	U		2.5	U		1.3	U	
Sulfate	600	250 [7]	17,419	NV	17,418.99	3,570			3,400			3,280			3,630			3,600			2,910		

Notes:

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

Client Sample Nomenclature
SS61 Spill Site 61
MW Monitoring Well
A Denotes a duplicate sample

Qualifiers
U Not detected
J Indicates an estimated value

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
[4] Table 5-18, *Basewide Background Study Report, Holloman Air Force Base, New Mexico* (NationView/Bhate JV III, July, 2011)
[5] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[6] Table 6-3, TPH Screening Guidelines for Kerosene and Jet Fuel, Concentration in Groundwater. *Risk Assessment Guidance for Site Investigations and Remediation* (NMED, June 2012)
[7] USEPA Secondary Drinking Water Standard (816-F-09-004, May 2009)
[8] Value established in the Basewide Background Study Report, HAFB, New Mexico (NationView/Bhate JV III, July 2011) and derived from the Total Groundwater UTL.
Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
Indicates combined TPH-GRO/DRO/ORO analytical results above the NMED TPH Screening Guideline for Kerosene and Jet Fuel, Concentration in Groundwater, Table 6-3
Indicates analytical results above the New Mexico Groundwater Quality Standard, or USEPA MCL, but below the NMED Approved Background Level

Table 5-1
Quarter 3 Sampling Event Groundwater Analytical Results (January 2013)
Spill Site SS-61 Performance Monitoring
Holloman Air Force Base, New Mexico

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			SS61-MW27			SS61-MW28			SS61-MW29			SS61-MW30			SS61-MW31		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background [3]	Dissolved Metals in Groundwater UTL [4]	Total Metals in Groundwater UTL [4]	FA1125-1			FA1125-5			FA1125-7			FA1125-9			FA1125-11		
Date Sampled:						1/23/2013			1/23/2013			1/22/2013			1/22/2013			1/22/2013		
Treatment Zone:						Zone A			Zone A			Zone A			Zone A			Zone A		
Analyte (Method)						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (USEPA SW846 8260B)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
Benzene	10	5	NV	NV	NV	0.33	J		0.21	U		0.21	U		0.21	U		0.24	J	
Bromobenzene	NV	NV	NV	NV	NV	0.22	U		0.22	U		0.22	U		0.22	U		0.22	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	0.21	U		1.4			0.28	J		0.21	U		4.3		
tert-Butylbenzene	NV	NV	NV	NV	NV	17.4			6.9			1.4			0.29	U		10.1		
Chlorobenzene	NV	100	NV	NV	NV	0.22	J		0.20	U		0.20	U		0.20	U		0.20	U	
Chloroform	100	NV	NV	NV	NV	0.26	U		0.26	U		0.26	U		0.61	J		0.26	U	
Carbon disulfide	NV	NV	NV	NV	NV	0.49	U		0.49	U		0.49	U		0.49	U		0.58	J	
1,1-Dichloroethane	25	NV	NV	NV	NV	0.21	U		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-Dichloroethane	10	5	NV	NV	NV	0.22	U		1.2			0.97	J		**31.4**			1.9		
m-Dichlorobenzene	NV	NV	NV	NV	NV	0.63	J		0.25	U		0.25	U		0.25	U		0.25	U	
o-Dichlorobenzene	NV	600	NV	NV	NV	1.6			0.22	U		0.22	U		0.22	U		0.22	U	
p-Dichlorobenzene	NV	75	NV	NV	NV	0.72	J		0.20	U		0.20	U		0.20	U		0.20	U	
Ethylbenzene	750	700	NV	NV	NV	0.29	U		0.37	J		0.29	U		0.29	U		0.29	U	
Isopropylbenzene	NV	NV	NV	NV	NV	0.20	U		47.6			9.3			0.20	U		128		
p-Isopropyltoluene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
n-Propylbenzene	NV	NV	NV	NV	NV	0.23	U		0.65	J		0.23	U		0.23	U		1.5		
1,2,4-Trimethylbenzene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
1,3,5-Trimethylbenzene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Toluene	750	1,000	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Trichloroethylene	100	5	NV	NV	NV	0.31	U		0.31	U		0.31	U		0.31	U		0.31	U	
m,p-Xylene	620	10,000	NV	NV	NV	0.30	U		0.30	U		0.30	U		0.30	U		0.30	U	
o-Xylene	620	10,000	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Semi-Volatile Organic Compounds (USEPA SW846 8270D)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
2,4-Dimethylphenol	NV	NV	NV	NV	NV	0.74	U		3.0	U		0.74	U		0.74	U		0.74	U	
2-Methylphenol	NV	NV	NV	NV	NV	0.69	U		2.8	U		0.69	U		0.69	U		0.69	U	
Phenol	5	NV	NV	NV	NV	0.53	U		2.2	U		0.53	U		0.53	U		0.53	U	
1,2-Dichlorobenzene	NV	600	NV	NV	NV	0.65	U		2.7	U		0.65	U		0.65	U		0.65	U	
1,3-Dichlorobenzene	NV	NV	NV	NV	NV	0.75	U		3.0	U		0.75	U		0.75	U		0.75	U	
1,4-Dichlorobenzene	NV	75	NV	NV	NV	0.67	U		2.7	U		0.67	U		0.67	U		0.67	U	
Naphthalene	NV	NV	NV	NV	NV	0.61	U		2.5	U		0.61	U		0.61	U		0.61	U	
Total Petroleum Hydrocarbons (USEPA SW846 8015C)	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L		
Gasoline Range Organics (C6-C10)	18.5 [6]	NV	NV	NV	NV	0.791			0.765			0.244			0.05	U		0.864		
Diesel Range Organics (C10-C22)	18.5 [6]	NV	NV	NV	NV	0.149	J		5.12			0.334			0.095	U		1.89		
Oil Range Organics (>C22-C36)	18.5 [6]	NV	NV	NV	NV	0.095	U		0.95	U		0.10	U		0.095	U		0.096	U	
Dissolved Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
Manganese	200	50 [7]	50	118.65	NV	**2,180**			**1,020**			**1,150**			**2,260**			**948**		
Total Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
Iron	1,000	300 [7]	300	NV	1,306.82	**3,630**			**1,050**			**626**			**437**			94.9	J	
Manganese	200	50 [7]	50	NV	745.38	**2,230**			**1,050**			**1,060**			**139**			**939**		
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L		
Nitrogen, Ammonia	NV	NV	NV	NV	NV	0.092	J		0.062	J		0.037	J		0.03	U		0.075	J	
Nitrogen, Total Kjeldahl	NV	NV	NV	NV	NV	3.3			3.8			4.0			0.74			0.46	J	
Iron, Ferrous	NV	NV	NV	NV	NV	2.6			0.88			0.03	U		0.13			0.048	J	
Iron, Ferric	NV	NV	NV	NV	NV	1.0			0.17	J		0.63			0.31	J		0.059	U	
Hydrogen Sulfide	NV	NV	NV	NV	NV	0.50	U		0.50	U		0.50	U		0.50	U		0.50	U	
Solids, Total Dissolved	1,000	500 [7]	NV	NV	65,956.58 [8]	**5,420**			**7,640**			**13,700**			**13,900**			**18,200**		
BOD, 5 Day	NV	NV	NV	NV	NV	8.0	U		13	U		4.0	U		4.0	U		4.0	U	
Chemical Oxygen Demand	NV	NV	NV	NV	NV	12.4			87			52.2			87			380		
Nitrogen, Nitrate	10	10	NV	NV	NV	2.5	U		5.0	U		5.0	U		10.0	U		10.0	U	
Sulfate	600	250 [7]	17,419	NV	17,418.99	3,260			5,740			5,860			5,050			4,980		

Notes:

NMWQCC New Mexico Water Quality Control Commission
USEPA United States Environmetal Protection Agency
MCL Maximum Contaminant Level
UTL Upper Tolerance Limit
NMED New Mexico Environmental Department
BOD Biological Oxygen Demand
µg/L micrograms per liter
mg/L milligrams per liter
NV No Value
Q Laboratory Qualifier
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Client Sample Nomenclature
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MW Monitoring Well
A Denotes a duplicate sample

Qualifiers
U Not detected
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[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
[4] Table 5-18, *Basewide Background Study Report, Holloman Air Force Base, New Mexico* (NationView/Bhate JV III, July, 2011)
[5] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[6] Table 6-3, TPH Screening Guidelines for Kerosene and Jet Fuel, Concentration in Groundwater. *Risk Assessment Guidance for Site Investigations and Remediation* (NMED, June 2012)
[7] USEPA Secondary Drinking Water Standard (816-F-09-004, May 2009)
[8] Value established in the Basewide Background Study Report, HAFB, New Mexico (NationView/Bhate JV III, July 2011) and derived from the Total Groundwater UTL.
Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
Indicates combined TPH-GRO/DRO/ORO analytical results above the NMED TPH Screening Guideline for Kerosene and Jet Fuel, Concentration in Groundwater, Table 6-3
Indicates analytical results above the New Mexico Groundwater Quality Standard, or USEPA MCL, but below the NMED Approved Background Level

Table 5-2
Quarter 4 Sampling Event Groundwater Analytical Results (April 2013)
Spill Site 61 Performance Monitoring
Holloman Air Force Base, New Mexico

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			SS61-MW21			SS61-MW23			SS61-MW24			SS61-MW25			SS61-MW26			SS61-MW27		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background [3]	Dissolved Metals in Groundwater UTL [4]	Total Metals in Groundwater UTL [4]	FA3615-1			FA3615-5			FA3615-7			FA3562-13			FA3615-3			FA3562-7		
Date Sampled:						4/10/2013			4/10/2013			4/10/2013			4/10/2013			4/10/2013			4/10/2013		
Treatment Zone:						Zone B			Zone B			Zone B			Zone B			Zone B			Zone A		
Analyte (Method)						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (USEPA SW846 8260B)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Benzene	10	5	NV	NV	NV	**176**			0.21	U		**19.1**			**3,460**			**21.8**			0.30	J	
n-Butylbenzene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.26	J		1.0	U		0.20	U		0.20	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	1.9			0.21	U		4.9			6.8			0.21	U		0.21	U	
tert-Butylbenzene	NV	NV	NV	NV	NV	2.9			1.2			5.3			7.7			0.29	U		10.2		
Chlorobenzene	NV	100	NV	NV	NV	0.20	U		0.20	U		0.20	U		9.9			0.20	U		0.20	U	
Chloroform	100	NV	NV	NV	NV	0.26	U		0.27	J		0.26	U		1.3	U		0.26	U		0.26	U	
Carbon disulfide	NV	NV	NV	NV	NV	0.49	U		0.49	U		0.83	J		2.5	U		0.49	U		0.49	U	
1,1-Dichloroethane	25	NV	NV	NV	NV	0.32	J		0.21	U		0.21	U		2.9	J		0.21	U		0.21	U	
1,2-Dichloroethane	10	5	NV	NV	NV	0.28	J		0.22	U		0.22	U		2.0	J		0.22	U		1.1		
m-Dichlorobenzene	NV	NV	NV	NV	NV	2.2			0.25	U		0.75	J		49.8			0.25	U		0.41	J	
o-Dichlorobenzene	NV	600	NV	NV	NV	8.5		J	0.22	U		2.8		J	185			0.22	U		1.0		
p-Dichlorobenzene	NV	75	NV	NV	NV	2.7			0.20	U		0.92	J		66.8			0.20	U		0.40	J	
Ethylbenzene	750	700	NV	NV	NV	92.7			0.29	U		242			94.6			5.8			0.29	U	
Isopropylbenzene	NV	NV	NV	NV	NV	223			0.20	U		542			1,290			11.6			0.20	U	
p-Isopropyltoluene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.52	J		1.0	U		0.20	U		0.20	U	
4-Methyl-2-pentanone	NV	NV	NV	NV	NV	2.8	J		2.3	U		3.9	J		11	U		2.3	U		2.3	U	
Naphthalene	30	NV	NV	NV	NV	1.0	U		1.0	U		2.5	J	J	5.0	U		1.0	U		1.0	U	
n-Propylbenzene	NV	NV	NV	NV	NV	14.8			0.23	U		30.2			37.5			0.31	J		0.23	U	
1,2,4-Trimethylbenzene	NV	NV	NV	NV	NV	5.5			0.20	U		72.7			1.0	U		1.6	J		0.20	U	
1,3,5-Trimethylbenzene	NV	NV	NV	NV	NV	0.32	J		0.20	U		6.1			1.0	U		0.20	J		0.20	U	
Toluene	750	1,000	NV	NV	NV	15.2			0.20	U		13.4			1.9	J		1.7			0.20	U	
m,p-Xylene	620	10,000	NV	NV	NV	32.4			0.30	U		165			3.1	J		8.0			0.30	U	
o-Xylene	620	10,000	NV	NV	NV	12.1			0.20	U		91.9			1.0	U		4.6			0.20	U	
Semi-Volatile Organic Compounds (USEPA SW846 8270D)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
2,4-Dimethylphenol	NV	NV	NV	NV	NV	0.82	U		0.82	U		10.8			3.0	U		9.7			0.74	U	
2-Methylphenol	NV	NV	NV	NV	NV	0.78	U		0.78	U		0.69	U		2.8	U		1.1	J		0.69	U	
Phenol	5	NV	NV	NV	NV	2.1	J		1.2	J		0.53	U		2.1	U		**5.5**			0.53	U	
1,2-Dichlorobenzene	NV	600	NV	NV	NV	5.7			0.73	U		1.8	J		187			0.66	U		0.65	U	
1,3-Dichlorobenzene	NV	NV	NV	NV	NV	1.7	J		0.83	U		0.75	U		55.6			0.75	U		0.75	U	
1,4-Dichlorobenzene	NV	75	NV	NV	NV	2.2	J		0.74	U		0.67	U		**79.0**			0.67	U		0.67	U	
Fluoranthene	NV	NV	NV	NV	NV	0.63	U		0.63	U		0.56	U		2.3	U		0.57	U		0.90	J	
Naphthalene	NV	NV	NV	NV	NV	0.68	U		0.68	U		1.8	J		2.5	U		0.62	U		0.61	U	
Total Petroleum Hydrocarbons (USEPA SW846 8015C)	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Gasoline Range Organics (C6-C10)	18.5 [6]	NV	NV	NV	NV	1.41			0.355			3.29			8.85			0.157			0.460		
Diesel Range Organics (C10-C22)	18.5 [6]	NV	NV	NV	NV	0.166	J		0.11	U		3.16			1.90			0.394			0.281		
Oil Range Organics (>C22-C36)	18.5 [6]	NV	NV	NV	NV	0.10	U		0.11	U		0.48	U		0.40	U		0.10	U		0.098	U	
Dissolved Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Manganese	200	50 [7]	50	118.65	NV	**1,460**			**482**			**231**			**648**			**81.7**			**2,090**		
Total Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Iron	1,000	300 [7]	300	NV	1,306.82	**2,670**			**1,650**			**743**			**1,140**			189	J		**2,480**		
Manganese	200	50 [7]	50	NV	745.38	**1,590**			**554**			**263**			**632**			**69.4**			**2,000**		
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Nitrogen, Ammonia	NV	NV	NV	NV	NV	0.030	U		0.045	J		0.030	U		0.094	J		0.030	U		0.030	U	
Nitrogen, Total Kjeldahl	NV	NV	NV	NV	NV	3.2			2.9			2.9			2.6			2.7			3.2		
Iron, Ferrous	NV	NV	NV	NV	NV	0.52			0.18			0.030	U		0.97			0.030	U		0.22		
Iron, Ferric	NV	NV	NV	NV	NV	2.2			1.5			0.74			0.17	J		0.19	J		2.3		
Hydrogen Sulfide	NV	NV	NV	NV	NV	6.3			0.50	U		0.79	J		15.0			0.50	U		0.50	U	
Solids, Total Dissolved	1,000	500 [7]	NV	NV	65,956.58 [8]	**5,620**		J	**5,200**		J	**5,370**		J	**6,010**		J	**4,380**		J	**5,490**		J
BOD, 5 Day	NV	NV	NV	NV	NV	5.6		J	2.0	U	UJ	5.2		J	16.6		J	3.0	J	J	2.0	U	UJ
Chemical Oxygen Demand	NV	NV	NV	NV	NV	34.4			12.3	J		36.8			54.3			9.8	J		14.8	J	
Nitrogen, Nitrate	10	10	NV	NV	NV	2.5	U	UJ	1.3	U		1.3	U		2.5	U	UJ	1.3	U		1.3	U	UJ
Sulfate	600	250 [7]	17,419	NV	17,418.99	3,530			3,340			3,440			3,810			3,090			2,980		

Notes:

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U Not detected
J Indicates an estimated value

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
[4] Table 5-18, *Basewide Background Study Report, Holloman Air Force Base, New Mexico* (NationView/Bhate JV III, July, 2011)
[5] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[6] Table 6-3, TPH Screening Guidelines for Kerosene and Jet Fuel, Concentration in Groundwater. *Risk Assessment Guidance for Site Investigations and Remediation* (NMED, June 2012)
[7] USEPA Secondary Drinking Water Standard (816-F-09-004, May 2009)
[8] Value established in the Basewide Background Study Report, HAFB, New Mexico (NationView/Bhate JV III, July 2011) and derived from the Total Groundwater UTL.

Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
Indicates combined TPH-GRO/DRO/ORO analytical results above the NMED TPH Screening Guideline for Kerosene and Jet Fuel, Concentration in Groundwater, Table 6-3
Indicates analytical results above the New Mexico Groundwater Quality Standard, or USEPA MCL, but below the NMED Approved Background Level

Table 5-2
Quarter 4 Sampling Event Groundwater Analytical Results (April 2013)
Spill Site 61 Performance Monitoring
Holloman Air Force Base, New Mexico

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			SS61-MW28			SS61-MW29			SS61-MW30			SS61-MW30-A			SS61-MW31		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background [3]	Dissolved Metals in Groundwater UTL [4]	Total Metals in Groundwater UTL [4]	FA3562-11			FA3562-5			FA3562-1			FA3562-3			FA3562-9		
Date Sampled:						4/10/2013			4/9/2013			4/9/2013			4/9/2013			4/10/2013		
Treatment Zone:						Zone A			Zone A			Zone A			Zone A			Zone A		
Analyte (Method)						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (USEPA SW846 8260B)	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**			**µg/L**			**µg/L**			**µg/L**			**µg/L**		
Benzene	10	5	NV	NV	NV	0.21	U		0.21	U		0.21	U		0.21	U		0.21	U	
n-Butylbenzene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	0.21	U		0.21	U		0.21	U		0.21	U		0.25	J	
tert-Butylbenzene	NV	NV	NV	NV	NV	1.0			0.29	U		0.29	U		0.34	J		0.92	J	
Chlorobenzene	NV	100	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Chloroform	100	NV	NV	NV	NV	0.26	U		0.26	U		0.43	J		0.33	J		0.26	U	
Carbon disulfide	NV	NV	NV	NV	NV	0.49	U		0.49	U		0.49	U		0.49	U		0.49	U	
1,1-Dichloroethane	25	NV	NV	NV	NV	0.21	U		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-Dichloroethane	10	5	NV	NV	NV	0.89	J		2.2			**27.8**			**27.2**			1.1		
m-Dichlorobenzene	NV	NV	NV	NV	NV	0.25	U		0.25	U		0.25	U		0.25	U		0.25	U	
o-Dichlorobenzene	NV	600	NV	NV	NV	0.22	U		0.22	U		0.22	U		0.22	U		0.22	U	
p-Dichlorobenzene	NV	75	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Ethylbenzene	750	700	NV	NV	NV	0.29	U		0.29	U		0.29	U		0.29	U		0.29	U	
Isopropylbenzene	NV	NV	NV	NV	NV	11.1			0.20	U		0.20	U		0.20	U		14.1		
p-Isopropyltoluene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
4-Methyl-2-pentanone	NV	NV	NV	NV	NV	2.3	U		2.3	U		2.3	U		2.3	U		2.4	J	
Naphthalene	30	NV	NV	NV	NV	1.0	U		1.0	U		1.0	U		1.0	U		1.0	U	
n-Propylbenzene	NV	NV	NV	NV	NV	0.23	U		0.23	U		0.23	U		0.23	U		0.23	U	
1,2,4-Trimethylbenzene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
1,3,5-Trimethylbenzene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Toluene	750	1,000	NV	NV	NV	0.23	J		0.20	U		0.20	U		0.20	U		0.20	U	
m,p-Xylene	620	10,000	NV	NV	NV	0.30	U		0.30	U		0.30	U		0.30	U		0.30	U	
o-Xylene	620	10,000	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Semi-Volatile Organic Compounds (USEPA SW846 8270D)	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**			**µg/L**			**µg/L**			**µg/L**			**µg/L**		
2,4-Dimethylphenol	NV	NV	NV	NV	NV	0.74	U		0.74	U		0.75	U		0.74	U		0.74	U	
2-Methylphenol	NV	NV	NV	NV	NV	0.69	U		0.70	U		0.71	U		0.70	U		0.70	U	
Phenol	5	NV	NV	NV	NV	0.53	U		0.53	U		0.54	U		0.53	U		0.53	U	
1,2-Dichlorobenzene	NV	600	NV	NV	NV	0.65	U		0.66	U		0.67	U		0.66	U		0.66	U	
1,3-Dichlorobenzene	NV	NV	NV	NV	NV	0.75	U		0.75	U		0.76	U		0.75	U		0.75	U	
1,4-Dichlorobenzene	NV	75	NV	NV	NV	0.67	U		0.67	U		0.68	U		0.67	U		0.67	U	
Fluoranthene	NV	NV	NV	NV	NV	0.56	U		0.57	U		0.58	U		0.57	U		0.57	U	
Naphthalene	NV	NV	NV	NV	NV	0.61	U		0.62	U		0.62	U		0.62	U		0.62	U	
Total Petroleum Hydrocarbons (USEPA SW846 8015C)	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**			**mg/L**			**mg/L**			**mg/L**			**mg/L**		
Gasoline Range Organics (C6-C10)	18.5 [6]	NV	NV	NV	NV	0.263			0.0509	J		0.050	U		0.050	U		0.343		
Diesel Range Organics (C10-C22)	18.5 [6]	NV	NV	NV	NV	6.05			0.262			0.096	U		0.097	U		7.71		
Oil Range Organics (>C22-C36)	18.5 [6]	NV	NV	NV	NV	1.1	U		0.10	U		0.0986	J		0.097	U		1.0	U	
Dissolved Metals Analysis (USEPA 200.7/SW846 6010C)	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**			**µg/L**			**µg/L**			**µg/L**			**µg/L**		
Manganese	200	50 [7]	50	118.65	NV	**479**			**316**			**907**		**J**	**1,370**		**J**	**338**		
Total Metals Analysis (USEPA 200.7/SW846 6010C)	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**			**µg/L**			**µg/L**			**µg/L**			**µg/L**		
Iron	1,000	300 [7]	300	NV	1,306.82	**523**			**400**			**462**		J	**840**		J	**1,930**		
Manganese	200	50 [7]	50	NV	745.38	**475**			**322**			**782**		J	**1,210**		J	**584**		
General Chemistry	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**			**mg/L**			**mg/L**			**mg/L**			**mg/L**		
Nitrogen, Ammonia	NV	NV	NV	NV	NV	0.030	U		0.030	U		0.030	U		0.030	U		0.030	U	
Nitrogen, Total Kjeldahl	NV	NV	NV	NV	NV	3.1			3.5			3.8			3.8			0.17	U	
Iron, Ferrous	NV	NV	NV	NV	NV	0.39			0.27			0.11		J	0.43		J	0.84		
Iron, Ferric	NV	NV	NV	NV	NV	0.13	J		0.13	J		0.35	J		0.41			1.1		
Hydrogen Sulfide	NV	NV	NV	NV	NV	0.50	U		0.50	U		0.50	U		0.50	U		0.50	U	
Solids, Total Dissolved	1,000	500 [7]	NV	NV	65,956.58 [8]	**8,700**		J	**15,000**		J	**12,400**		J	**14,900**		J	**17,300**		J
BOD, 5 Day	NV	NV	NV	NV	NV	2.2	J	J	2.0	U	UJ	5.7		J	2.0	U	UJ	2.0	U	UJ
Chemical Oxygen Demand	NV	NV	NV	NV	NV	42.0			9.9	J		19.8	J	J	118		J	213		
Nitrogen, Nitrate	10	10	NV	NV	NV	5.0	U	UJ	5.0	U	UJ	7.2	J	J	7.0	J	J	10	U	UJ
Sulfate	600	250 [7]	17,419	NV	17,418.99	5,410			6,150			5,380			5,080			5,580		

Notes:

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

Client Sample Nomenclature
SS61 Spill Site 61
MW Monitoring Well
A Denotes a duplicate sample

Qualifiers
U Not detected
J Indicates an estimated value

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
[4] Table 5-18, *Basewide Background Study Report, Holloman Air Force Base, New Mexico* (NationView/Bhate JV III, July, 2011)
[5] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
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8 Value established in the Basewide Background Study Report, HAFB, New Mexico (NationView/Bhate JV III, July 2011) and derived from the Total Groundwater UTL.

Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
Indicates combined TPH-GRO/DRO/ORO analytical results above the NMED TPH Screening Guideline for Kerosene and Jet Fuel, Concentration in Groundwater, Table 6-3
Indicates analytical results above the New Mexico Groundwater Quality Standard, or USEPA MCL, but below the NMED Approved Background Level

Table 5-3
Quarter 5 Sampling Event Groundwater Analytical Results (July 2013)
Spill Site 61 Performance Monitoring
Holloman Air Force Base, New Mexico

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			SS61-MW21			SS61-MW23			SS61-MW24			SS61-MW25			SS61-MW25-A			SS61-MW26		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background [3]	Dissolved Metals in Groundwater UTL [4]	Total Metals in Groundwater UTL [4]	FA6583-1			FA6583-3			FA6510-9			FA6583-5			FA6583-7			FA6510-7		
Date Sampled:						7/17/2013			7/17/2013			7/17/2013			7/18/2013			7/18/2013			7/17/2013		
Treatment Zone:						Zone B			Zone B			Zone B			Zone B			Zone B			Zone B		
Analyte (Method)						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (USEPA SW846 8260B)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Benzene	10	5	NV	NV	NV	**113**			0.21	U		3.1			**2,930**			**2,850**			**442**		
sec-Butylbenzene	NV	NV	NV	NV	NV	1.1	J		0.21	U		2.7			11	U		4.8	J		1.3		
tert-Butylbenzene	NV	NV	NV	NV	NV	2.1	J		0.29	U		2.9			15	U		7.3	J		1.9		
Chlorobenzene	NV	100	NV	NV	NV	1.7	J		0.20	U		0.40	U		20.1	J		16.1			0.20	U	
Chloroform	100	NV	NV	NV	NV	0.66	U		0.26	U		0.53	U		13	U		2.6	U		0.26	U	
Carbon disulfide	NV	NV	NV	NV	NV	1.2	U		0.49	U		0.99	U		25	U		4.9	U		1.6	J	
1,2-Dichloroethane	10	5	NV	NV	NV	0.56	U		0.22	U		0.44	U		11	U		2.7	J		0.22	U	
m-Dichlorobenzene	NV	NV	NV	NV	NV	2.3	J		0.25	U		0.51	U		87			97.5			0.25	U	
o-Dichlorobenzene	NV	600	NV	NV	NV	6.5			0.22	U		0.62	J		359			371			0.22	U	
p-Dichlorobenzene	NV	75	NV	NV	NV	2.8			0.20	U		0.40	U		**136**			**129**			0.20	U	
Ethylbenzene	750	700	NV	NV	NV	89.6			0.29	U		198			66.6			67.3			95.5		
Isopropylbenzene	NV	NV	NV	NV	NV	406			0.20	U		427			1270			1280			258		
p-Isopropyltoluene	NV	NV	NV	NV	NV	0.5	U		0.20	U		0.54	J		10	U		2.0	U		0.20	U	
Methylene chloride	100	5	NV	NV	NV	**10.8**	J		2.0	U		4.6	J		**181**	J	J	**33.8**	J	J	2.0	U	
Naphthalene	30	NV	NV	NV	NV	2.5	U		1.0	U		2.5	J		50	U		10	U		1.0	U	
n-Propylbenzene	NV	NV	NV	NV	NV	11.2			0.23	U		17.2			35.3	J		32.3			8.0		
1,2,4-Trimethylbenzene	NV	NV	NV	NV	NV	6.1			0.20	U		104			10	U		2.0	U		39.2		
Toluene	750	1,000	NV	NV	NV	4.2			0.20	U		4.3			10.3	J	J	2.5	J	J	44.2		
m,p-Xylene	620	10,000	NV	NV	NV	30.5			0.30	U		150			15	U		3.6	J		120		
o-Xylene	620	10,000	NV	NV	NV	2.4	J		0.20	U		50.9			10	U		2.0	U		96.7		
Semi-Volatile Organic Compounds (USEPA SW846 8270D)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
2,4-Dichlorophenol	NV	NV	NV	NV	NV	0.67	U		0.69	U		0.67	U		1.8	J		2.0	J		0.67	U	
Phenol	5	NV	NV	NV	NV	0.53	U		0.54	U		0.53	U		2.5	J	J	3.9	J	J	0.53	U	
1,2-Dichlorobenzene	NV	600	NV	NV	NV	4.0	J		0.67	U		0.65	U		216			215			0.65	U	
1,3-Dichlorobenzene	NV	NV	NV	NV	NV	1.3	J		0.76	U		0.75	U		60.4			61.5			0.75	U	
1,4-Dichlorobenzene	NV	75	NV	NV	NV	1.6	J		0.68	U		0.67	U		**79.9**			**81.1**			0.67	U	
Dibenzofuran	NV	NV	NV	NV	NV	0.72	U		0.73	U		0.72	U		2.1	J		2.5	J		0.72	U	
Naphthalene	NV	NV	NV	NV	NV	0.61	U		0.62	U		0.70	J		0.65	J		0.63	J		0.61	U	
Total Petroleum Hydrocarbons (USEPA SW846 8015C)	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Gasoline Range Organics (C6-C10)	18.5 [6]	NV	NV	NV	NV	1.20			0.050	U		2.01			7.55			7.43			1.97		
Diesel Range Organics (C10-C22)	18.5 [6]	NV	NV	NV	NV	0.208	J		0.150	J		3.76			4.49		J	2.01		J	0.220	J	
Oil Range Organics (>C22-C36)	18.5 [6]	NV	NV	NV	NV	0.096	U		0.096	U		0.39	U		0.382	J		0.38	U		0.097	U	
Dissolved Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Manganese	200	50 [7]	50	118.65	NV	**1,300**			**215**			**322**			**609**			**639**			**103**		
Total Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Iron	1,000	300 [7]	300	NV	65.56	**480**			**2,850**			**2,220**			**1,100**			**1,140**			29	U	
Manganese	200	50 [7]	50	NV	118.65	**1,420**			**288**			**363**			**638**			**661**			**109**		
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Nitrogen, Ammonia	NV	NV	NV	NV	NV	0.03	U		0.040	J		0.042	J		0.03	U		0.03	U		0.03	U	
Nitrogen, Total Kjeldahl	NV	NV	NV	NV	NV	0.98			1.1			1.5			1.4			1.4			1.5		
Iron, Ferrous	NV	NV	NV	NV	NV	0.27			0.03	U		0.18			0.39		J	0.88		J	0.074	J	
Iron, Ferric	NV	NV	NV	NV	NV	0.21	J		2.9			2.0			0.71		J	0.26		J	0.059	U	
Hydrogen Sulfide	NV	NV	NV	NV	NV	5.2			0.50	U		0.71	J		5.5			6.0			0.50	U	
Solids, Total Dissolved	1,000	500 [7]	NV	NV	65,956.58 [8]	**6,360**			**5,430**			**5,200**			**5,980**			**5,960**			**4,300**		
BOD, 5 Day	NV	NV	NV	NV	NV	18.0		J	4.0	U		8.3			27.2		J	28.0		J	4.0	U	
Chemical Oxygen Demand	NV	NV	NV	NV	NV	40.3			12.6	J		38.8			50.3			55.8			12.1	J	
Nitrogen, Nitrate	10	10	NV	NV	NV	2.5	U		2.1	J		2.5	U		2.5	U		2.5			2.5	U	
Sulfate	600	250 [7]	17,419	NV	17,418.99	3,700			3,290			3,660			3,570			3,640			1,500		

Notes:

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

Client Sample Nomenclature
SS61 Spill Site 61
MW Monitoring Well
A Denotes a duplicate sample

Qualifiers
U Not detected
J Indicates an estimated value

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
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[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
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[8] Value established in the Basewide Background Study Report, HAFB, New Mexico (NationView/Bhate JV III, July 2011) and derived from the Total Groundwater UTL.
Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
Indicates combined TPH-GRO/DRO/ORO analytical results above the NMED TPH Screening Guideline for Kerosene and Jet Fuel, Concentration in Groundwater, Table 6-3
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Table 5-3
Quarter 5 Sampling Event Groundwater Analytical Results (July 2013)
Spill Site 61 Performance Monitoring
Holloman Air Force Base, New Mexico

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			SS61-MW27			SS61-MW28			SS61-MW29			SS61-MW30			SS61-MW31		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background [3]	Dissolved Metals in Groundwater UTL [4]	Total Metals in Groundwater UTL [4]	FA6510-5			FA6510-3			FA6510-1			FA6468-1			FA6464-1		
Date Sampled:						7/17/2013			7/16/2013			7/16/2013			7/16/2013			7/16/2013		
Treatment Zone:						Zone A			Zone A			Zone A			Zone A			Zone A		
Analyte (Method)						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (USEPA SW846 8260B)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
Benzene	10	5	NV	NV	NV	0.21	U		0.21	U		0.21	U		0.21	U		0.21	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	0.21	U		1.2			0.21	U		0.21	U		2.3		
tert-Butylbenzene	NV	NV	NV	NV	NV	13.4			2.8			0.93	J		0.30	J		6.00		
Chlorobenzene	NV	100	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Chloroform	100	NV	NV	NV	NV	0.26	U		0.26	U		0.26	U		0.51	J		0.26	U	
Carbon disulfide	NV	NV	NV	NV	NV	0.49	U		0.49	U		0.49	U		0.49	U		0.49	U	
1,2-Dichloroethane	10	5	NV	NV	NV	0.22	U		0.79	J		0.41	J		**28.9**			0.87	J	
m-Dichlorobenzene	NV	NV	NV	NV	NV	0.38	J		0.25	U		0.25	U		0.25	U		0.25	U	
o-Dichlorobenzene	NV	600	NV	NV	NV	0.79	J		0.22	U		0.22	U		0.22	U		0.22	U	
p-Dichlorobenzene	NV	75	NV	NV	NV	0.38	J		0.20	U		0.20	U		0.20	U		0.20	U	
Ethylbenzene	750	700	NV	NV	NV	0.29	U		0.29	U		0.29	U		0.29	U		0.29	U	
Isopropylbenzene	NV	NV	NV	NV	NV	0.24	J		68.7			2.5			0.20	U		54.9		
p-Isopropyltoluene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Methylene chloride	100	5	NV	NV	NV	2.0	U		2.0	U		2.0	U		2.0	U		2.0	U	
Naphthalene	30	NV	NV	NV	NV	1.0	U		1.0	U		1.0	U		1.0	U		1.0	U	
n-Propylbenzene	NV	NV	NV	NV	NV	0.23	U		0.87	J		0.23	U		0.23	U		0.68	J	
1,2,4-Trimethylbenzene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Toluene	750	1,000	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
m,p-Xylene	620	10,000	NV	NV	NV	0.30	U		0.30	U		0.30	U		0.30	U		0.30	U	
o-Xylene	620	10,000	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Semi-Volatile Organic Compounds (USEPA SW846 8270D)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
2,4-Dichlorophenol	NV	NV	NV	NV	NV	0.67	U		0.67	U		0.68	U		0.67	U		0.67	U	
Phenol	5	NV	NV	NV	NV	0.53	U		0.53	U		0.53	U		0.53	U		0.53	U	
1,2-Dichlorobenzene	NV	600	NV	NV	NV	0.65	U		0.65	U		0.66	U		0.65	U		0.65	U	
1,3-Dichlorobenzene	NV	NV	NV	NV	NV	0.75	U		0.75	U		0.75	U		0.75	U		0.75	U	
1,4-Dichlorobenzene	NV	75	NV	NV	NV	0.67	U		0.67	U		0.67	U		0.67	U		0.67	U	
Dibenzofuran	NV	NV	NV	NV	NV	0.72	U		0.72	U		0.72	U		0.72	U		0.72	U	
Naphthalene	NV	NV	NV	NV	NV	0.61	U		0.61	U		0.62	U		0.61	U		0.61	U	
Total Petroleum Hydrocarbons (USEPA SW846 8015C)	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L		
Gasoline Range Organics (C6-C10)	18.5 [6]	NV	NV	NV	NV	0.675			0.191			0.0902	J		0.050	U		0.427		
Diesel Range Organics (C10-C22)	18.5 [6]	NV	NV	NV	NV	0.173	J		6.62			0.653			0.096	U		12.3		
Oil Range Organics (>C22-C36)	18.5 [6]	NV	NV	NV	NV	0.096	U		0.48	U		0.096	U		0.096	U		0.97	U	
Dissolved Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
Manganese	200	50 [7]	50	118.65	NV	**2,490**			**875**			**584**			**1,570**			**533**		
Total Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
Iron	1,000	300 [7]	300	NV	65.56	**4,310**			33.5	J		29	U		**335**			**367**		
Manganese	200	50 [7]	50	NV	118.65	**2,450**			**612**			**562**			**1,640**			**553**		
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L		
Nitrogen, Ammonia	NV	NV	NV	NV	NV	0.03	U		0.03	U		0.042	J		0.03	U		0.03	U	
Nitrogen, Total Kjeldahl	NV	NV	NV	NV	NV	1.8			1.0			2.4			2.7			3.0		
Iron, Ferrous	NV	NV	NV	NV	NV	4.0			0.074	J		0.03	U		0.03	U		0.034	J	
Iron, Ferric	NV	NV	NV	NV	NV	0.31	J		0.059	U		0.059	U		0.34	J		0.33	J	
Hydrogen Sulfide	NV	NV	NV	NV	NV	0.50	U		0.50	U		0.50	U		0.50	U		0.50	U	
Solids, Total Dissolved	1,000	500 [7]	NV	NV	65,956.58 [8]	**6,040**			**8,640**			**11,900**			**16,500**			**17,600**		
BOD, 5 Day	NV	NV	NV	NV	NV	4.0	U		11.0			4.0	U		2.0	U		5.9		
Chemical Oxygen Demand	NV	NV	NV	NV	NV	50.9			55.8			46.1			89.7			396		
Nitrogen, Nitrate	10	10	NV	NV	NV	2.5	U		5.0	U		5.0	U		10	U		25	U	
Sulfate	600	250 [7]	17,419	NV	17,418.99	3,240			4,950			5,500			3,420			5,130		

Notes:

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

Client Sample Nomenclature
SS61 Spill Site 61
MW Monitoring Well
A Denotes a duplicate sample

Qualifiers
U Not detected
J Indicates an estimated value

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
[4] Table 5-18, *Basewide Background Study Report, Holloman Air Force Base, New Mexico* (NationView/Bhate JV III, July, 2011)
[5] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[6] Table 6-3, TPH Screening Guidelines for Kerosene and Jet Fuel, Concentration in Groundwater. *Risk Assessment Guidance for Site Investigations and Remediation* (NMED, February 2012)
[7] USEPA Secondary Drinking Water Standard (816-F-09-004, May 2009)
[8] Value established in the Basewide Background Study Report, HAFB, New Mexico (NationView/Bhate JV III, July 2011) and derived from the Total Groundwater UTL.
Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
Indicates combined TPH-GRO/DRO/ORO analytical results above the NMED TPH Screening Guideline for Kerosene and Jet Fuel, Concentration in Groundwater, Table 6-3
Indicates analytical results above the New Mexico Groundwater Quality Standard, or USEPA MCL, but below the NMED Approved Background Level

Table 5-4
Quarter 6 Sampling Event Groundwater Analytical Results (October 2013)
Spill Site 61 Performance Monitoring
Holloman Air Force Base, New Mexico

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			SS61-MW21			SS61-MW23			SS61-MW24			SS61-MW25			SS61-MW25-A			SS61-MW26		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background [3]	Dissolved Metals in Groundwater UTL [4]	Dissolved Metals in Groundwater UTL [4]	FA9420-1			FA9420-3			FA9375-7			FA9375-3			FA9375-5			FA9375-1		
Date Sampled:						10/23/2013			10/24/2013			10/23/2013			10/23/2013			10/23/2013			10/22/2013		
Treatment Zone:						Zone B			Zone B			Zone B			Zone B			Zone B			Zone B		
Analyte (Method)						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (USEPA SW846 8260B)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Benzene	10	5	NV	NV	NV	**166**			0.21	U		**6.1**			**117**		J	**882**		J	**47.5**		
Bromobenzene	NV	NV	NV	NV	NV	0.22	U		0.22	U		1.1	U		1.1	U		0.98	J		0.22	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	1.2			0.21	U		4.3	J		1.1	J	J	2.3		J	0.21	U	
tert-Butylbenzene	NV	NV	NV	NV	NV	2.0			0.29	U		3.9	J		4.6	J	J	6.9		J	0.29	U	
Chlorobenzene	NV	100	NV	NV	NV	0.20	U		0.20	U		1.0	U		15.8			17.6			0.20	U	
1,1-Dichloroethane	25	NV	NV	NV	NV	0.21	U		0.21	U		1.1	U		1.1	U		2.2			0.21	U	
1,2-Dichloroethane	10	5	NV	NV	NV	0.33	J		0.22	U		1.1	U		1.1	U		0.44	U		0.22	U	
m-Dichlorobenzene	NV	NV	NV	NV	NV	1.6			0.25	U		1.3	U		74.4			86.3			0.25	U	
o-Dichlorobenzene	NV	600	NV	NV	NV	6.3			0.22	U		1.8	J		269			283			0.22	U	
p-Dichlorobenzene	NV	75	NV	NV	NV	2.2			0.20	U		1.0	U		**104**			**113**			0.20	U	
Ethylbenzene	750	700	NV	NV	NV	130			0.29	U		181			1.5	U		2.5			21.7		
Isopropylbenzene	NV	NV	NV	NV	NV	316			0.20	U		251			46.9		J	161		J	41.0		
Methylene chloride	100	5	NV	NV	NV	2.0	U		2.0	U		**20.7**	J		**18.7**	J	J	**7.9**	J	J	2.0	U	
n-Propylbenzene	NV	NV	NV	NV	NV	11.7			0.23	U		26.0			1.2	J	J	4.1		J	0.99	J	
1,2,4-Trimethylbenzene	NV	NV	NV	NV	NV	8.2			0.20	U		71.0			1.0	U		0.40	U		8.2		
1,3,5-Trimethylbenzene	NV	NV	NV	NV	NV	0.20	U		0.20	U		1.6	J		1.0	U		0.40	U		1.2	J	
Toluene	750	1,000	NV	NV	NV	6.6			0.20	U		2.7	J		1.0	U		0.86	J		3.2		
m,p-Xylene	620	10,000	NV	NV	NV	45.4			0.30	U		96.1			1.5	U		0.59	U		38.5		
o-Xylene	620	10,000	NV	NV	NV	2.3			0.20	U		25.4			1.0	U		0.40	U		16.8		
Semi-Volatile Organic Compounds (USEPA SW846 8270D)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
2,4-Dichlorophenol	NV	NV	NV	NV	NV	0.66	U		0.66	U		0.66	U		1.8	J		1.9	J		0.66	U	
2,4-Dimethylphenol	NV	NV	NV	NV	NV	0.72	U		0.72	U		8.8			0.72	U		0.72	U		0.72	U	
2-Methylphenol	NV	NV	NV	NV	NV	0.67	U		0.67	U		0.67	U		0.67	U		1.2	J		0.68	U	
4-Chloroaniline	NV	NV	NV	NV	NV	0.64	U		0.64	U		0.64	U		0.64	U		0.65	J		0.65	U	
1,2-Dichlorobenzene	NV	600	NV	NV	NV	4.6	J		0.64	U		0.64	U		NA			173			0.64	U	
1,3-Dichlorobenzene	NV	NV	NV	NV	NV	1.3	J		0.72	U		0.72	U		51.5			49.4			0.73	U	
1,4-Dichlorobenzene	NV	75	NV	NV	NV	1.6	J		0.65	U		0.65	U		71.9			67.8			0.65	U	
Dibenzofuran	NV	NV	NV	NV	NV	0.70	U		0.70	U		0.70	U		3.0	J		2.7	J		0.70	U	
Fluoranthene	NV	NV	NV	NV	NV	0.55	U		0.55	U		0.55	U		0.55	U		0.55	U		0.55	U	
1-Methylnaphthalene	NV	NV	NV	NV	NV	0.66	U		0.66	U		0.66	U		0.72	J		0.81	J		0.66	U	
Naphthalene	NV	NV	NV	NV	NV	0.59	U		0.59	U		1.0	J		0.73	J		0.80	J		0.60	U	
Total Petroleum Hydrocarbons (USEPA SW846 8015C)	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Gasoline Range Organics (C6-C10)	18.5 [6]	NV	NV	NV	NV	0.414			0.050	U		1.98			1.73			2.13			0.402		
Diesel Range Organics (C10-C22)	18.5 [6]	NV	NV	NV	NV	0.175	J		0.121	J		2.65			2.42			2.84			0.149	J	
Oil Range Organics (>C22-C36)	18.5 [6]	NV	NV	NV	NV	0.093	U		0.093	U		0.37	U		0.513	J		0.539	J		0.093	U	
Dissolved Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Manganese	200	50 [7]	50	118.65	NV	**1,390**		J	**219**			**615**			**635**			**648**			48.5		
Total Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
Iron	1,000	300 [7]	300	NV	65.56	**861**			99.1	J		**401**			**1,160**			**1,120**			268	J	
Manganese	200	50 [7]	50	NV	118.65	**1,400**		J	**247**		J	**625**			**665**			**635**			**56.5**		
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Nitrogen, Ammonia	NV	NV	NV	NV	NV	0.030	U		0.030	U		0.030	U		0.030	U		0.030	U		0.030	U	
Nitrogen, Total Kjeldahl	NV	NV	NV	NV	NV	0.93			0.78			1.2			1.2			1.1			1.0		
Iron, Ferrous	NV	NV	NV	NV	NV	0.42			0.039	J		0.18			1.0			1.0			0.039	J	
Iron, Ferric	NV	NV	NV	NV	NV	0.44			0.060	J		0.22	J		0.16	J		0.12	J		0.23	J	
Hydrogen Sulfide	NV	NV	NV	NV	NV	5.1		J	0.50	U	UJ	4.1		J	12.5		J	12.0		J	0.50	U	UJ
Solids, Total Dissolved	1,000	500 [7]	NV	NV	65,956.58 [8]	**5,270**			**4,860**			**7,040**			**5,600**			**6,270**			**2,570**		
BOD, 5 Day	NV	NV	NV	NV	NV	14.8		J	2.0	U	UJ	13.9			30.3			26.0			4.0	U	
Chemical Oxygen Demand	NV	NV	NV	NV	NV	39.8			5.3	U		44.7			49.7			64.6			14.9	J	
Nitrogen, Nitrate	10	10	NV	NV	NV	2.5	U		1.5	J		2.5	U		2.5	U		2.5	U		1.3	U	
Sulfate	600	250 [7]	17,419	NV	17,418.99	3,610			3,250			3,940			3,420			3,470			2,810		

Notes:

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

Client Sample Nomenclature

SS61 Spill Site 61
MW Monitoring Well
A Denotes a duplicate sample

Qualifiers

U Not detected
J Indicates an estimated value

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
[4] Table 5-18, *Basewide Background Study Report, Holloman Air Force Base, New Mexico* (NationView/Bhate JV III, July, 2011)
[5] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[6] Table 6-3, TPH Screening Guidelines for Kerosene and Jet Fuel, Concentration in Groundwater. *Risk Assessment Guidance for Site Investigations and Remediation* (NMED, February 2012)
[7] USEPA Secondary Drinking Water Standard (816-F-09-004, May 2009)
[8] Value established in the Basewide Background Study Report, HAFB, New Mexico (NationView/Bhate JV III, July 2011) and derived from the Total Groundwater UTL.

Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
Indicates combined TPH-GRO/DRO/ORO analytical results above the NMED TPH Screening Guideline for Kerosene and Jet Fuel, Concentration in Groundwater, Table 6-3
Indicates analytical results above the New Mexico Groundwater Quality Standard, or USEPA MCL, but below the NMED Approved Background Level

Table 5-4
Quarter 6 Sampling Event Groundwater Analytical Results (October 2013)
Spill Site 61 Performance Monitoring
Holloman Air Force Base, New Mexico

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			SS61-MW27			SS61-MW28			SS61-MW29			SS61-MW30			SS61-MW31		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background [3]	Dissolved Metals in Groundwater UTL [4]	Dissolved Metals in Groundwater UTL [4]	FA9328-5			FA9328-3			FA9328-1			FA9288-3			FA9288-1		
Date Sampled:						10/22/2013			10/22/2013			10/22/2013			10/21/2013			10/21/2013		
Treatment Zone:						Zone A			Zone A			Zone A			Zone A			Zone A		
Analyte (Method)						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (USEPA SW846 8260B)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
Benzene	10	5	NV	NV	NV	0.21	U		0.21	U		0.21	U		0.21	U		0.21	U	
Bromobenzene	NV	NV	NV	NV	NV	0.22	U		0.22	U		0.22	U		0.22	U		0.22	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	0.21	U		3.1			0.21	U		0.21	U		0.42	J	
tert-Butylbenzene	NV	NV	NV	NV	NV	14.0			12.7			1.6			0.29	U		1.9		
Chlorobenzene	NV	100	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
1,1-Dichloroethane	25	NV	NV	NV	NV	0.21	U		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-Dichloroethane	10	5	NV	NV	NV	0.22	U		1.2			0.96	J		**7.9**			0.42	J	
m-Dichlorobenzene	NV	NV	NV	NV	NV	0.33	J		0.25	U		0.25	U		0.25	U		0.25	U	
o-Dichlorobenzene	NV	600	NV	NV	NV	0.72	J		0.22	U		0.22	U		0.22	U		0.22	U	
p-Dichlorobenzene	NV	75	NV	NV	NV	0.30	J		0.20	U		0.20	U		0.20	U		0.20	U	
Ethylbenzene	750	700	NV	NV	NV	0.29	U		0.79	J		0.29	U		0.29	U		0.29	U	
Isopropylbenzene	NV	NV	NV	NV	NV	4.5			114			0.53	J		0.20	U		13.5		
Methylene chloride	100	5	NV	NV	NV	2.0	U		2.0	U		2.0	U		2.0	U		2.0	U	
n-Propylbenzene	NV	NV	NV	NV	NV	0.23	U		2.3			0.23	U		0.23	U		0.23	U	
1,2,4-Trimethylbenzene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
1,3,5-Trimethylbenzene	NV	NV	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Toluene	750	1,000	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
m,p-Xylene	620	10,000	NV	NV	NV	0.30	U		0.30	U		0.30	U		0.30	U		0.30	U	
o-Xylene	620	10,000	NV	NV	NV	0.20	U		0.20	U		0.20	U		0.20	U		0.20	U	
Semi-Volatile Organic Compounds (USEPA SW846 8270D)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
2,4-Dichlorophenol	NV	NV	NV	NV	NV	0.66	U		0.66	U		0.66	U		0.66	U		0.66	U	
2,4-Dimethylphenol	NV	NV	NV	NV	NV	0.72	U		0.72	U		0.72	U		0.72	U		0.72	U	
2-Methylphenol	NV	NV	NV	NV	NV	0.68	U		0.67	U		0.67	U		0.67	U		0.67	U	
4-Chloroaniline	NV	NV	NV	NV	NV	0.65	U		0.64	U		0.64	U		0.64	U		0.64	U	
1,2-Dichlorobenzene	NV	600	NV	NV	NV	0.64	U		0.64	U		0.64	U		0.64	U		0.64	U	
1,3-Dichlorobenzene	NV	NV	NV	NV	NV	0.73	U		0.72	U		0.72	U		0.72	U		0.72	U	
1,4-Dichlorobenzene	NV	75	NV	NV	NV	0.65	U		0.65	U		0.65	U		0.65	U		0.65	U	
Dibenzofuran	NV	NV	NV	NV	NV	0.70	U		0.70	U		0.70	U		0.70	U		0.70	U	
Fluoranthene	NV	NV	NV	NV	NV	0.55	J		0.55	U		0.55	U		0.55	U		0.55	U	
1-Methylnaphthalene	NV	NV	NV	NV	NV	0.66	U		0.66	U		0.66	U		0.66	U		0.66	U	
Naphthalene	NV	NV	NV	NV	NV	0.60	U		0.59	U		0.59	U		0.59	U		0.59	U	
Total Petroleum Hydrocarbons (USEPA SW846 8015C)	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L		
Gasoline Range Organics (C6-C10)	18.5 [6]	NV	NV	NV	NV	0.676			0.688			0.0842	J		0.050	U		0.0967	J	
Diesel Range Organics (C10-C22)	18.5 [6]	NV	NV	NV	NV	0.188	J		3.33			0.190	J		0.0983	J		1.76		
Oil Range Organics (>C22-C36)	18.5 [6]	NV	NV	NV	NV	0.093	U		0.46	U		0.105	J		0.093	U		0.101	J	
Dissolved Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
Manganese	200	50 [7]	50	118.65	NV	**2,570**			**965**			**613**			**999**			**133**		
Total Metals Analysis (USEPA 200.7/SW846 6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L		
Iron	1,000	300 [7]	300	NV	65.56	**4,740**			**1,100**			29	U		29	U		221	J	
Manganese	200	50 [7]	50	NV	118.65	**2,530**			**991**			**658**			**954**			**142**		
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L		
Nitrogen, Ammonia	NV	NV	NV	NV	NV	0.030	U		0.036	J		0.044	J		0.030	U		0.077	J	
Nitrogen, Total Kjeldahl	NV	NV	NV	NV	NV	1.0			1.3			1.5			1.2			0.86		
Iron, Ferrous	NV	NV	NV	NV	NV	3.8			0.93			0.053	J		0.033	J		0.030	U	
Iron, Ferric	NV	NV	NV	NV	NV	0.94			0.17	J		0.059	U		0.059	U		0.22	J	
Hydrogen Sulfide	NV	NV	NV	NV	NV	0.50	U		1.1			0.50	U		1.2			0.87	J	
Solids, Total Dissolved	1,000	500 [7]	NV	NV	65,956.58 [8]	**5,840**			**11,100**			**13,600**			**13,800**			**16,000**		
BOD, 5 Day	NV	NV	NV	NV	NV	4.0	U		6.3			4.0	U		4.0	U		4.0	U	
Chemical Oxygen Demand	NV	NV	NV	NV	NV	7.4	J		56.8			37.0			104			591		
Nitrogen, Nitrate	10	10	NV	NV	NV	2.5	U		5.0	U		5.0	U		10	U		25	U	
Sulfate	600	250 [7]	17,419	NV	17,418.99	3,020			4,580			5,460			5,270			5,170		

Notes:

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

Client Sample Nomenclature
SS61 Spill Site 61
MW Monitoring Well
A Denotes a duplicate sample

Qualifiers
U Not detected
J Indicates an estimated value

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
[4] Table 5-18, *Basewide Background Study Report, Holloman Air Force Base, New Mexico* (NationView/Bhate JV III, July, 2011)
[5] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[6] Table 6-3, TPH Screening Guidelines for Kerosene and Jet Fuel, Concentration in Groundwater. *Risk Assessment Guidance for Site Investigations and Remediation* (NMED, February 2012)
[7] USEPA Secondary Drinking Water Standard (816-F-09-004, May 2009)
[8] Value established in the Basewide Background Study Report, HAFB, New Mexico (NationView/Bhate JV III, July 2011) and derived from the Total Groundwater UTL.
Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
Indicates combined TPH-GRO/DRO/ORO analytical results above the NMED TPH Screening Guideline for Kerosene and Jet Fuel, Concentration in Groundwater, Table 6-3
Indicates analytical results above the New Mexico Groundwater Quality Standard, or USEPA MCL, but below the NMED Approved Background Level

Table 6-1
Second Semiannual Sampling Event Soil Analytical Results (April 2013)
Spill Site SS-61 Performance Monitoring
Holloman Air Force Base, New Mexico

Client Sample Identification:	**Soil Screening Levels**	SS61-SB68B-27			SS61-SB69B-30			SS61-SB70B-28			SS61-SB71B-28			SS61-SB72B-29			SS61-SB72B-29A			SS61-SB73B-27			SS61-SB74B-28			SS61-SB76B-30		
Lab Sample Identification:	**NMED Residential[1]**	FA3526-1			FA3526-2			FA3526-3			FA3526-4			FA3561-1			FA3561-2			FA3561-3			FA3561-4			FA3561-5		
Date Sampled:		4/8/2013			4/8/2013			4/9/2013			4/9/2013			4/9/2013			4/9/2013			4/9/2013			4/10/2013			4/10/2013		
Treatment Zone:		Zone A			Zone A			Zone A			Zone A			Zone B			Zone B			Zone B			Zone B			Zone B		
Analyte (Method)		**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**
Volatile Organic Compounds (USEPA SW846 8260B)	**mg/kg**	**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**		
Acetone	66,600	19	U		20.0	J		18	U		14	U		1,200	U		1,400	U		1,200	U		16	U		195		
Benzene	15.4	0.95	U		0.70	U		0.88	U		0.71	U		62	U		68	U		3,680			5.4			0.79	U	
sec-Butylbenzene	NV [4]	1.2	U		0.84	U		156			0.86	U		1,270			1,220			1,030			12.3			15.8		
tert-Butylbenzene	NV [4]	1.1	U		0.83	U		1,040			0.84	U		512			495			406			18.3			26.0		
Carbon disulfide	1,530	2.2	J		1.4	U		5.4			2.1	J		120	U		140	U		120	U		8.8			2.3	J	
1,2-Dichloroethane	7.89	1.1	U		3.1	J		1.1	U		0.85	U		74	U		82	U		75	U		0.99	U		0.95	U	
Ethylbenzene	68.4	1.0	U		0.77	U		0.97	U		0.78	U		4,590			4,410			342			27.4			0.87	U	
Isopropylbenzene	2,430	1.3	U		0.92	U		112			0.94	U		39,400			46,200			40,800			388			2.2	J	
n-Propylbenzene	3,400 [3]	0.98	U		0.72	U		0.91	U		0.73	U		2,390			2,260			1,420			14.4			0.81	U	
1,2,4-Trimethylbenzene	62 [3]	1.0	U		0.75	U		0.95	U		0.77	U		2,070			1,860			67	U		0.89	U		0.85	U	
Toluene	5,270	0.95	U		0.70	U		0.88	U		0.71	U		62	U		68	U		62	U		1.7	J		0.79	U	
m,p-Xylene	816 [6]	2.0	U		1.4	U		1.8	U		1.5	U		2,680			2,230			130	U		3.2	J		1.6	U	
Semi-Volatile Organic Compounds (USEPA SW846 8270D)	**mg/kg**	**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**		
Phenol	18,300	37	U		33	U		39	U		34	U		38	U		38	U		131	J		36	U		34	U	
Benzo(a)anthracene	1.48	23	U		20	U		33.4	J		21	U		24.4	J	J	42.9	J	J	45.0	J		22	U		21	U	
Benzo(b)fluoranthene	1.48	23	U		20	U		25.2	J		21	U		23	U		29.0	J		27.2	J		22	U		21	U	
Chrysene	148	23	U		20	U		31.5	J		21	U		23	U		40.0	J		39.9	J		22	U		21	U	
Fluoranthene	2,290	23	U		20	U		71.0	J		21	U		38.3	J	J	97.3	J	J	108	J		22	U		21	U	
Phenanthrene	1,830	23	U		20	U		24	U		21	U		23	U		52.7	J		61.4	J		22	U		21	U	
Pyrene	1,720	23	U		20	U		62.5	J		21	U		33.7	J	J	67.7	J	J	78.1	J		22	U		21	U	
Total Petroleum Hydrocarbons (USEPA SW846 8015C)	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Gasoline Range Organics (C6-C10)	1,000 [5]	3.3	U		2.5	U		507			2.7	U		458			447			266			33.1			124		
Diesel Range Organics (C10-C22)	1,000 [5]	4.5	U		4.0	U		10.8	J		4.2	U		6.01	J		6.12	J		6.18	J		4.5	U		4.2	U	
Oil Range Organics (>C22-C36)	1,000 [5]	4.5	U		4.0	U		4.8	U		4.2	U		4.7	U		6.00	J		4.4	U		4.5	U		4.2	U	
General Chemistry (USEPA SM19 2540G)	**%**	**%**			**%**			**%**			**%**			**%**			**%**			**%**			**%**			**%**		
Solids, Percent	NV	73.5			82.3			70.1			78.5			70.7			71.9			75.4			73.5			78.8		

Notes:
NMED = New Mexico Environment Department
USEPA = U.S. Environmental Protection Agency
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
% = percent
NV = No Value
SSL = Soil Screening Level
Q = Laboratory Qualifier
Q1 = Validating Chemist Qualifier

Qualifiers

U = Not detected
J = Indicates an estimated value
B = Indicates analyte found in associated method blank

Client Sample Nomenclature

SS61 = Spill Site 61
SB = Soil Boring Sample
Final digits equal the ending sample depth (feet below ground surface)

[1] Table A-1, NMED Soil Screening Levels. *Risk Assessment Guidance for Site Investigations and Remediation* (NMED, June 2012).
[2] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[3] USEPA Region 3, 6, and 9 Regional Screening Levels (RSLs) (November, 2013)
[4] No Value established for NMED Residential SSL (June, 2012) and USEPA RSL (November, 2013)
[5] Table 6-3, TPH Screening Guidelines for Kerosene and Jet Fuel, Residential Direct Exposure. Risk Assessment Guidance for Site Investigations and Remediation (NMED, June 2012).
[6] Screening level for Xylenes (total) (Table A-1, NMED 2012)
Bold value indicates analytes above NMED SSLs (June, 2012) or TPH results above NMED TPH Screening Guidelines (June, 2012)
Indicates that the combined TPH-GRO/DRO/ORO results exceed the NMED TPH Screening Guidelines (Kerosene and Jet Fuel, Residential Direct Exposure)

Table 6-2
Third Semiannual Sampling Event Soil Analytical Results (October 2013)
Spill Site SS-61 Performance Monitoring
Holloman Air Force Base, New Mexico

Client Sample Identification:	**Soil Screening Levels**	SS61-SB68C-27			SS61-SB69C-30			SS61-SB70C-28			SS61-SB70C-28-A			SS61-SB71C-28			SS61-SB72C-29			SS61-SB73C-27			SS61-SB74C-28			SS61-SB76C-30		
Lab Sample Identification:	**NMED**	FA9327-1			FA9327-2			FA9376-1			FA9376-2			FA9376-3			FA9376-4			FA9376-5			FA9421-1			FA9421-2		
Date Sampled:	**Residential[1]**	10/22/2013			10/22/2013			10/22/2013			10/22/2013			10/22/2013			10/23/2013			10/23/2013			10/23/2013			10/23/2013		
Treatment Zone:		Zone A			Zone A			Zone A			Zone A			Zone A			Zone B			Zone B			Zone B			Zone B		
Analyte (Method)		**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**	**Result [2]**	**Q**	**Q1**
Volatile Organic Compounds (USEPA SW846 8260B)	**mg/kg**	**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**		
Acetone	66,600	24	U		16	U		1,100	U		1,100	U		43.1			1,300	U		1,100	U		18	U		19	U	
Benzene	15.4	1.2	U		0.78	U		149	J	J	64.4	J	J	0.82	U		63	U		8,800			0.92	U		0.96	U	
n-Butylbenzene	3,900 [3]	1.5	U		1.0	U		70	U		69	U		1.1	U		81	U		148	J		1.2	U		1.2	U	
sec-Butylbenzene	NV [4]	1.4	U		0.94	U		9,340		J	1,880		J	1.0	U		104	J		2,510			20.5			1.2	U	
tert-Butylbenzene	NV [4]	1.4	U		0.92	U		6,230		J	1,880		J	0.98	U		150	J		901			38.3			1.2	J	
Carbon disulfide	1,530	3.5	J		1.6	U		110	U		110	U		2.7	J		130	U		110	U		5.8			7.8		
1,2-Dichloroethane	7.89	1.4	U		3.3	J		65	U		64	U		0.99	U		76	U		66	U		1.1	U		1.1	U	
Ethylbenzene	68.4	1.3	U		0.85	U		60	U		59	U		0.91	U		69	U		24,700			1.0	U		1.1	U	
Hexane	938	2.7	U		1.8	U		120	U		120	U		1.9	U		140	U		127	J		2.1	U		2.2	U	
Isopropylbenzene	2,430	1.6	U		1.0	U		67,700		J	8,870		J	1.1	U		654			109,000			27.4			1.3	U	
p-Isopropyltoluene	NV [4]	1.6	U		1.0	U		71	U		70	U		1.1	U		83	U		87.6	J		1.2	U		1.3	U	
n-Propylbenzene	3,400 [3]	1.2	U		0.8	U		214	J		55	U		0.85	U		65	U		4,470			0.95	U		0.98	U	
1,2,4-Trimethylbenzene	62 [3]	1.3	U		0.84	U		59	U		58	U		0.89	U		68	U		24,700			1.0	U		1.0	U	
Toluene	5,270	1.2	U		0.78	U		55	U		53	U		0.82	U		63	U		182	J		1.8	J		0.96	U	
m,p-Xylene	816 [6]	2.4	U		1.6	U		110	U		110	U		1.7	U		130	U		17,600			1.9	U		2.0	U	
o-Xylene	816 [6]	1.2	U		0.78	U		55	U		53	U		0.82	U		63	U		449			0.92	U		0.96	U	
Semi-Volatile Organic Compounds (USEPA SW846 8270D)	**mg/kg**	**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**			**µg/kg**		
Phenol	18,300	44	U		35	U		34	U		34	U		35	U		34	U		83.9	J		36	U		37	U	
Acenaphthene	3,440	32	U		25	U		42.5	J		25	U		25	U		25	U		24	U		26	U		27	U	
Anthracene	17,200	27	U		21	U		71.6	J		21	U		21	U		21	U		20	U		22	U		23	U	
Benzo(a)anthracene	1.48	27	U		21	U		170	J	J	70.7	J	J	29.3	J		21	U		36.9	J		22	U		23	U	
Benzo(a)pyrene	0.148	27	U		21	U		68.9	J	J	30.1	J	J	21	U		21	U		20	U		22	U		23	U	
Benzo(b)fluoranthene	1.48	27	U		21	U		109	J	J	51.5	J	J	21	U		21	U		22.8	J		22	U		23	U	
Benzo(g,h,i)perylene	NV [4]	27	U		21	U		34.3	J		21	U		21	U		21	U		20	U		22	U		23	U	
Benzo(k)fluoranthene	14.8	32	U		25	U		84.8	J	J	35	J	J	25	U		25	U		24	U		26	U		27	U	
Chrysene	148	27	U		21	U		180	J	J	80.1	J	J	27	J		21	U		36.4	J		22	U		23	U	
Fluoranthene	2,290	27	U		21	U		458		J	186	J	J	61.2	J		21	U		83.3	J		22	U		23	U	
Indeno(1,2,3-cd)pyrene	1.48	27	U		21	U		34.9	J		21	U		21	U		21	U		20	U		22	U		23	U	
Phenanthrene	1,830	27	U		21	U		21	U		21	U		21	U		21	U		60	J		22	U		23	U	
Pyrene	1,720	27	U		21	U		425		J	181	J	J	48.5	J		21	U		66.4	J		22	U		23	U	
Total Petroleum Hydrocarbons (USEPA SW846 8015C)	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Gasoline Range Organics (C6-C10)	1,000 [5]	4.4	U		2.7	U		**3,890**		J	**1,320**		J	5.04	J		156			**1,400**			216			3.4	U	
Diesel Range Organics (C10-C22)	1,000 [5]	5.5	U		4.3	U		7.18	J		4.2	U		4.3	U		4.3	U		7.77	J		4.3	U		4.6	U	
Oil Range Organics (>C22-C36)	1,000 [5]	5.5	U		6.21	J		4.63	J		4.2	U		4.3	U		4.3	U		4.69	J		4.3	U		4.6	U	
General Chemistry (USEPA SM19 2540G)	**%**	**%**			**%**			**%**			**%**			**%**			**%**			**%**			**%**			**%**		
Solids, Percent	NV	61.0			77.9			79.9			79.1			77.8			78.0			80.9			77.0			72.8		

Notes:

NMED = New Mexico Environment Department
USEPA = U.S. Environmental Protection Agency
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
% = percent
NV = No Value
SSL = Soil Screening Level
Q = Laboratory Qualifier
Q1 = Validating Chemist Qualifier

Qualifiers

U = Not detected
J = Indicates an estimated value
B = Indicates analyte found in associated method blank

Client Sample Nomenclature

SS61 = Spill Site 61
SB = Soil Boring Sample
Final digits equal the ending sample depth (feet below ground surface)

[1] Table A-1, NMED Soil Screening Levels. *Risk Assessment Guidance for Site Investigations and Remediation* (NMED, June 2012).
[2] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[3] USEPA Region 3, 6, and 9 Regional Screening Levels (RSLs) (November, 2013)
[4] No Value established for NMED Residential SSL (June, 2012) and USEPA RSL (November, 2013)
[5] Table 6-3, TPH Screening Guidelines for Kerosene and Jet Fuel, Residential Direct Exposure. Risk Assessment Guidance for Site Investigations and Remediation (NMED, June 2012).
[6] Screening level for Xylenes (total) (Table A-1, NMED 2012)
Bold value indicates analytes above NMED SSLs (June, 2012) or TPH results above NMED TPH Screening Guidelines (June, 2012)
Indicates that the combined TPH-GRO/DRO/ORO results exceed the NMED TPH Screening Guidelines (Kerosene and Jet Fuel, Residential Direct Exposure)

APPENDIX A

Soil Boring Logs

April 2013
Soil Boring Logs

HTW DRILLING LOG

1.COMPANY NAME Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR Precision Sampling	HOLE NO. SS61-SB68B SHEET 1 OF 3 SHEETS
3.PROJECT Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER Alex Bonham	6.MANUFACTURER'S DESIGNATION OF DRILL Central Mining Equipment (CME) 750X	
7.SIZES AND TYPE OF DRILLING EQUIPMENT 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters) Northing 3636403.520 Easting 397962.657 9.SURFACE ELEVATION (FT. NAVD88) 4097.761	
	10.DATE STARTED 8-Apr-13	11.DATE COMPLETED 8-Apr-13
12.OVERBURDEN THICKNESS NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs) 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (27 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	Dustin McNeil

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Asphalt Surface					
	Gravel Roadbase					Logged From Auger Cuttings
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					
2						
3						
4	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed					
5		0-5 PID: 0.8 ppm				
6	5YR 6/4 - Light Reddish Brown Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 1.3 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB68B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
	14		10-15 PID: 1.1 ppm				
	15						
	16	5YR 4/4 - Reddish Brown Silty fine grained gypsum crystals intermixed					
	17						
	18						
	19		15-20 PID: 13.7 ppm				
	20	10YR 8/2 - White Silty Sand high gypsum content Dense					
	21	5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	22						
	23						
	24		20-25 PID: 14.7 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB68B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26	7.5YR 5/0 - Gray Staining Silty Sand Hydrocarbon odor			SS61-SB68B-27 @ 1615		
	27						
	28						
	29		25-30 PID: 17.8 ppm				
	30	*End of Boring at 30' bgs*					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB69B		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Alex Bonham	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 750X	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636393.988 Easting 397950.622	
	9.SURFACE ELEVATION (FT. NAVD88): 4097.662	
	10.DATE STARTED: 8-Apr-13	11.DATE COMPLETED: 8-Apr-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (30 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	Austin McNeil

	Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	0	Gravel Surface					
	1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
	2						
	3						
	4	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed	0-5 PID: 0.2 ppm				
	5						
	6	5YR 6/4 - Light Reddish Brown Sand Well Sorted Dry					
	7						
	8						
	9		5-10 PID: 1.3 ppm				
	10						

HTW DRILLING LOG

HOLE NO. SS61-SB69B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
	14		10-15 PID: 0.9 ppm				
	15						
	16	5YR 4/4 - Reddish Brown Silt fine grained gypsum crystals intermixed					
	17						
	18						
	19		15-20 PID: 3.6 ppm				
	20	10YR 8/2 - White Silty Sand high gypsum content Dense					
	21						
	22						
	23						
	24	5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	25		20-25 PID: 9.0 ppm				

HTW DRILLING LOG

HOLE NO. SS61-SB69B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
		GLEY 1 6/1 - Greenish Gray Staining Silty Sand					
	27	Hydrocarbon odor					
	28						
	29				SS61-SB69B-30 @ 1830		
		Saturated	25-30 PID: 24.9 ppm				
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB70B		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Alex Bonham	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 750X	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636334.581 Easting 397938.756	
	9.SURFACE ELEVATION (FT. NAVD88): 4095.34	
	10.DATE STARTED: 9-Apr-13	11.DATE COMPLETED: 9-Apr-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (28 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	Dustin McNeil

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Gravel Surface					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3						
4	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed	0-5 PID: 0.2 ppm				
5						
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 0.7 ppm				
10						

	Project: SS-61 Performance Monitoring	HOLE NO. SS61-SB70B

HTW DRILLING LOG

HOLE NO. SS61-SB70B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
	14	5YR 4/4 - Reddish Brown Silty Sand	10-15 PID: 1.6 ppm				
	15						
	16	10YR 8/1 - White Silty Sand high gypsum content Dense					
	17						
	18						
	19	5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed	15-20 PID: 2.4 ppm				
	20						
	21						
	22						
	23						
	24	7.5YR 6/4 - Light Brown Silty Sand Saturated	20-25 PID: 114 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB70B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
		GLEY 1 6/1 - Greenish Gray Staining Silty Sand Hydrocarbon odor					
	27				SS61-SB70B-28 @ 1010		
	28						
	29						
		Saturated	25-30 PID: 2495 ppm				
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB71B		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Alex Bonham	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 750X	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636307.069 Easting 397924.188	
	9.SURFACE ELEVATION (FT. NAVD88): 4093.598	
	10.DATE STARTED: 9-Apr-13	11.DATE COMPLETED: 9-Apr-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (28 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	Dustin McNeil

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Asphalt Surface					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3						
4	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed	0-5 PID: 0.2 ppm				
5						
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 0.5 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB71B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
	14						
		5YR 4/4 - Reddish Brown Silty Sand	10-15 PID: 6.8 ppm				
	15						
	16						
		10YR 8/1 - White Silty Sand high gypsum content					
	17	Dense					
	18						
		5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	19		15-20 PID: 9.8 ppm				
	20						
	21						
	22						
	23						
	24						
		7.5YR 6/4 - Light Brown Silty Sand Saturated	20-25 PID: 16.1 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB71B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
		GLEY 1 6N - Gray Staining Silty Sand Hydrocarbon odor					
	27				SS61-SB71B-28 @ 1215		
	28						
	29						
		10YR/8/3 Sand, Poorly Sorted Dense, Moist	25-30 PID: 89.8 ppm				
	30	*End of Boring at 30' bgs*					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB72B		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Alex Bonham	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 750X	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636277.507 Easting 397979.454	
	9.SURFACE ELEVATION (FT. NAVD88): 4093.426	
	10.DATE STARTED: 9-Apr-13	11.DATE COMPLETED: 9-Apr-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 2 (29 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	Dustin McNeil

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Asphalt Surface					
	Roadbase Gravels					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3						
4	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed	0-5 PID: 0.0 ppm				
5						
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 0.5 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB72B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
		5YR 4/4 - Reddish Brown Silty Sand					
	14						
			10-15 PID: 3.1 ppm				
	15						
	16						
		10YR 8/1 - White Silty Sand high gypsum content					
	17	Dense					
	18						
		5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	19						
			15-20 PID: 5.7 ppm				
	20						
	21						
	22						
		Thin Stained Gray lens					
	23						
		Reddish Brown Clay					
		Thin Stained Gray lens					
	24						
		Reddish Brown Clay					
		7.5YR 6/4 - Light Brown Silty Sand Moist	20-25 PID: 166 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB72B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
		GLEY 1 5N - Gray Staining Sand Strong Hydrocarbon odor					
	27						
	28						
					SS61-SB72B-29 SS61-SB72B-29-A @ 1440		Field Duplicate collected
	29						
		10YR/8/3 Very Pale Brown Sand Dense Moist	25-30 PID: 1654 ppm				
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB73B		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Alex Bonham	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 750X	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636257.405 Easting 398047.532	
	9.SURFACE ELEVATION (FT. NAVD88): 4092.842	
	10.DATE STARTED: 9-Apr-13	11.DATE COMPLETED: 9-Apr-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (27' bgs)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	Dustin McNeil

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Gravel Surface					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed					
4						
5		0-5 PID: 1.1 ppm				
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 10.3 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB73B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
		5YR 4/4 - Reddish Brown Silty Sand					
	14						
		10YR 8/1 - White Silty Sand high gypsum content Dense	10-15 PID: 39.1 ppm				
	15						
	16						
	17						
	18						
		5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed	15-20 PID: 49.6 ppm				
	19						
	20						
	21						
	22						
	23						
	24						
		Visible Gray staining Strong Hydrocarbon Odor Silty Sand Moist	20-25 PID: 1030 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB73B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
	27				SS61-SB73B-27 @ 1635		
	28						
	29						
		Sand Coarse gypsum xls Saturated	25-30 PID: 2107 ppm				
	30	*End of Boring at 30' bgs*					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB74B		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Alex Bonham	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 750X	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636240.800 Easting 398107.392	
	9.SURFACE ELEVATION (FT. NAVD88): 4094.578	
	10.DATE STARTED: 10-Apr-13	11.DATE COMPLETED: 10-Apr-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (28 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	Dustin McNeil

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Backfilled Soil					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed					
4						
5		0-5 PID: 0.4 ppm				
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 0.6 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB74B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13	5YR 4/4 - Reddish Brown Silty Sand					
	14		10-15 PID: 3.4 ppm				
	15	10YR 8/1 - White Silty Sand high gypsum content					
	16						
	17	5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	18						
	19		15-20 PID: 11.1 ppm				
	20	7.5 YR 6/4 - Light Brown Sand lense					
	21						
	22	5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	23						
	24	Thin lense of Gray staining Strong Hydrocarbon Odor					
	25	5YR 4/4 - Reddish Brown Clay	20-25 PID: 17.3 ppm				

HTW DRILLING LOG

HOLE NO. SS61-SB74B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	GLEY 5/1 - Gray Strong Hydrocarbon Odor Silty Sand					
	26						
	27						
					SS61-SB74B-28 @ 0900		
	28						
	29						
			25-30 PID: 1789 ppm				
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB76B		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Alex Bonham	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 750X	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636232.267 Easting 398136.524	
	9.SURFACE ELEVATION (FT. NAVD88): 4095.779	
	10.DATE STARTED: 10-Apr-13	11.DATE COMPLETED: 10-Apr-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (30 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	Dustin McNeil

	Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	0	Asphalt Surface					
		Gravel Roadbase					
	1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
	2						
	3	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed					
	4						
	5		0-5 PID: 0.0 ppm				
	6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
	7						
	8						
	9		5-10 PID: 0.9 ppm				
	10						

HTW DRILLING LOG

HOLE NO. SS61-SB76B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
	14		10-15 PID: 2.7 ppm				
	15						
	16	10YR 8/3 - Very Pale Brown Sand high gypsum content					
	17	5YR 6/4 - Light Reddish Brown Silty Sand fine gypsum crystals intermixed					
	18						
	19		15-20 PID: 6.4 ppm				
	20						
	21						
	22						
	23	5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed Moist					
	24		20-25 PID: 7.3 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB76B

PROJECT: SS-61 Performance Monitoring

INSPECTOR: D. McNeil

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
	27						
		GLEY 1 6N - Gray Silty Sand Visibly Stained Strong Hydrocarbon Odor					
	28						
	29						
			25-30 PID: 3064 ppm		SS61-SB76B-30 @ 1100		
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

October 2013
Soil Boring Logs

HTW DRILLING LOG

HOLE NO. SS61-SB68C		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Juan Barraza	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 75	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636403.520 Easting 397962.657	
	9.SURFACE ELEVATION (FT. NAVD88): 4097.761	
	10.DATE STARTED: 22-Oct-13	11.DATE COMPLETED: 22-Oct-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (27 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Asphalt Surface					
	Gravel Roadbase					Logged From Auger Cuttings
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					
2						
3						
4	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed					
5		0-5 PID: 2.9 ppm				
6						
	5YR 6/4 - Light Reddish Brown Sand Well Sorted Dry					
7						
8						
9						
10		5-10 PID: 1.6 ppm				

HTW DRILLING LOG

HOLE NO. SS61-SB68C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
	14		10-15 PID: 86.4 ppm				
	15						
	16	5YR 4/4 - Reddish Brown Silty fine grained gypsum crystals intermixed					
	17						
	18						
	19		15-20 PID: 33.4 ppm				
	20	10YR 8/2 - White Silty Sand high gypsum content Dense					
	21	5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	22						
	23						
	24		20-25 PID: 556 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB68C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
		7.5YR 5/0 - Gray Staining Silty Sand Hydrocarbon odor			SS61-SB68C-27 @ 1000		
	27						
	28						
	29		25-30 PID: 8.9 ppm				
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB69C		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Juan Barraza	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 75	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636393.988 Easting 397950.622	
	9.SURFACE ELEVATION (FT. NAVD88): 4097.662	
	10.DATE STARTED: 22-Oct-13	11.DATE COMPLETED: 22-Oct-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (30 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Gravel Surface					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3						
4	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed	0-5 PID: 17.1 ppm				
5						
6	5YR 6/4 - Light Reddish Brown Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 10.0 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB69C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
	14		10-15 PID: 15.5 ppm				
	15						
		5YR 4/4 - Reddish Brown Silt fine grained gypsum crystals intermixed					
	16						
	17						
	18						
	19						
			15-20 PID: 108 ppm				
	20	10YR 8/2 - White Silty Sand high gypsum content Dense					
	21						
	22						
	23						
		5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	24						
			20-25 PID: 73.9 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB69C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
		GLEY 1 6/1 - Greenish Gray Staining Silty Sand					
	27	Hydrocarbon odor					
	28						
	29				SS61-SB69C-30 @ 1130		
		Saturated	25-30 PID: 89.5 ppm				
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB70C		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Juan Barraza	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 75	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636334.581 Easting 397938.756	
	9.SURFACE ELEVATION (FT. NAVD88): 4095.34	
	10.DATE STARTED: 22-Oct-13	11.DATE COMPLETED: 22-Oct-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 2 (28 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Gravel Surface					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3						
4	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed	0-5 PID: 16.7 ppm				
5						
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 223 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB70C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
	14	5YR 4/4 - Reddish Brown Silty Sand	10-15 PID: 287 ppm				
	15						
	16	10YR 8/1 - White Silty Sand high gypsum content Dense					
	17						
	18						
	19	5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed	15-20 PID: 91.3 ppm				
	20						
	21						
	22						
	23						
	24	7.5YR 6/4 - Light Brown Silty Sand Saturated	20-25 PID: 418 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB70C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
		GLEY 1 6/1 - Greenish Gray Staining Silty Sand Hydrocarbon odor					Field Duplicate collected
	27			SS61-SB70C-28 SS61-SB70C-28-A @ 1340			
	28						
	29						
		Saturated	25-30 PID: 3,302 ppm				
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB71C		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Juan Barraza	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 75	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636307.069 Easting 397924.188	
	9.SURFACE ELEVATION (FT. NAVD88): 4093.598	
	10.DATE STARTED: 22-Oct-13	11.DATE COMPLETED: 22-Oct-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (28 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Asphalt Surface					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3						
4	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed	0-5 PID: 227 ppm				
5						
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 890 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB71C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
	14						
		5YR 4/4 - Reddish Brown Silty Sand	10-15 PID: 222 ppm				
	15						
	16						
		10YR 8/1 - White Silty Sand high gypsum content Dense					
	17						
	18						
		5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed	15-20 PID: 315 ppm				
	19						
	20						
	21						
	22						
	23						
	24						
		7.5YR 6/4 - Light Brown Silty Sand Saturated	20-25 PID: 495 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB71C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
		GLEY 1 6N - Gray Staining Silty Sand Hydrocarbon odor					
	27				SS61-SB71C-28 @ 1505		
	28						
	29						
		10YR/8/3 Sand, Poorly Sorted Dense, Moist	25-30 PID: 188 ppm				
	30	*End of Boring at 30' bgs*					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB72C		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Juan Barraza	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 75	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636277.507 Easting 397979.454	
	9.SURFACE ELEVATION (FT. NAVD88): 4093.426	
	10.DATE STARTED: 23-Oct-13	11.DATE COMPLETED: 23-Oct-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (29 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Asphalt Surface					
	Roadbase Gravels					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3						
4	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed	0-5 PID: 112 ppm				
5						
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 487 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB72C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
		5YR 4/4 - Reddish Brown Silty Sand					
	14						
			10-15 PID: 934 ppm				
	15						
	16						
		10YR 8/1 - White Silty Sand high gypsum content					
	17	Dense					
	18						
		5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	19						
			15-20 PID: 838 ppm				
	20						
	21						
	22						
		Thin Stained Gray lens					
	23						
		Reddish Brown Clay					
		Thin Stained Gray lens					
	24						
		Reddish Brown Clay					
		7.5YR 6/4 - Light Brown Silty Sand	20-25 PID: 1,341 ppm				
	25	Moist					

HTW DRILLING LOG

HOLE NO. SS61-SB72C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
		GLEY 1 5N - Gray Staining Sand Strong Hydrocarbon odor					
	27						
	28						
					SS61-SB72C-29 @ 0920		
	29						
		10YR/8/3 Very Pale Brown Sand Dense Moist	25-30 PID: 1,235 ppm				
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB73C		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Juan Barraza	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 75	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636257.405 Easting 398047.532	
	9.SURFACE ELEVATION (FT. NAVD88): 4092.842	
	10.DATE STARTED: 23-Oct-13	11.DATE COMPLETED: 23-Oct-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (27' bgs)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Gravel Surface					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed					
4						
5		0-5 PID: 11.9 ppm				
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 14.5 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB73C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
		5YR 4/4 - Reddish Brown Silty Sand					
	14						
		10YR 8/1 - White Silty Sand high gypsum content Dense	10-15 PID: 177 ppm				
	15						
	16						
	17						
	18						
		5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed	15-20 PID: 384 ppm				
	19						
	20						
	21						
	22						
	23						
	24						
		Visible Gray staining Strong Hydrocarbon Odor Silty Sand Moist	20-25 PID: 389 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB73C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
	27				SS61-SB73C-27 @ 1055		
	28						
	29						
	30	Sand Coarse gypsum xls Saturated	25-30 PID: 1,630 ppm				
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB74C		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Juan Barraza	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 75	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636240.800 Easting 398107.392	
	9.SURFACE ELEVATION (FT. NAVD88): 4094.578	
	10.DATE STARTED: 23-Oct-13	11.DATE COMPLETED: 23-Oct-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED		UNDISTURBED		19.TOTAL NUMBER OF CORE BOXES	
None						
20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (28 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			
22.DISPOSITION OF HOLE: Abandoned	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR		
	X	NA	NA			

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Backfilled Soil					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed					
4						
5		0-5 PID: 29.7 ppm				
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 14.4 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB74C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13	5YR 4/4 - Reddish Brown Silty Sand					
	14		10-15 PID: 25.4 ppm				
	15	10YR 8/1 - White Silty Sand high gypsum content					
	16						
	17	5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	18						
	19		15-20 PID: 42.6 ppm				
	20	7.5 YR 6/4 - Light Brown Sand lense					
	21	5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed					
	22						
	23						
	24	Thin lense of Gray staining Strong Hydrocarbon Odor					
	25	5YR 4/4 - Reddish Brown Clay	20-25 PID: 15.8 ppm				

HTW DRILLING LOG

HOLE NO. SS61-SB74C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	GLEY 5/1 - Gray Strong Hydrocarbon Odor Silty Sand					
	26						
	27						
					SS61-SB74C-28 @ 1315		
	28						
	29						
			25-30 PID: 2,640 ppm				
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

HTW DRILLING LOG

HOLE NO. SS61-SB76C		
1.COMPANY NAME: Bhate Environmental Associates, Inc.	2.DRILLING CONTRACTOR: Precision Sampling	SHEET 1 OF 3 SHEETS
3.PROJECT: Spill Site 61 (SS-61) Performance Monitoring	4.LOCATION: Holloman Air Force Base, New Mexico	
5.NAME OF DRILLER: Juan Barraza	6.MANUFACTURER'S DESIGNATION OF DRILL: Central Mining Equipment (CME) 75	
7.SIZES AND TYPE OF DRILLING EQUIPMENT: 8.25" O.D. Hollow Stem Augers	8.HOLE LOCATION (WGS 84, UTM Meters): Northing 3636232.267 Easting 398136.524	
	9.SURFACE ELEVATION (FT. NAVD88): 4095.779	
	10.DATE STARTED: 23-Oct-13	11.DATE COMPLETED: 23-Oct-13
12.OVERBURDEN THICKNESS: NA	15. DEPTH GROUNDWATER ENCOUNTERED (ft bgs)	
13.DEPTH DRILLED INTO ROCK: NA	16.DEPTH TO WATER (btoc) & TIME ELAPSED AFTER DRILLING COMPLETED	
14.TOTAL DEPTH OF HOLE (ft bgs): 30	17.OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18.GEOTECHNICAL SAMPLES:	DISTURBED	UNDISTURBED	19.TOTAL NUMBER OF CORE BOXES
None			

20.SAMPLES FOR CHEMICAL ANALYSIS: 1 (30 ft)	VOC	SVOC	TPH	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
	8260	8270	8015			

22.DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
Abandoned	X	NA	NA	

Depth	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
0	Asphalt Surface					
	Gravel Roadbase					
1	10YR 8/3 - Very Pale Brown Silty Sand Unconsolidated Dry					Logged From Auger Cuttings
2						
3	7.5YR 6/4 - Light Brown Silty Sand very fine grained gypsum crystals intermixed					
4						
5		0-5 PID: 9.8 ppm				
6	5YR 6/4 - Light Reddish Brown Silty Sand Well Sorted Dry					
7						
8						
9		5-10 PID: 8.5 ppm				
10						

HTW DRILLING LOG

HOLE NO. SS61-SB76C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 2 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	10	Same as above					
	11						
	12						
	13						
	14						
			10-15 PID: 2.6 ppm				
	15						
	16						
		10YR 8/3 - Very Pale Brown Sand high gypsum content					
	17						
		5YR 6/4 - Light Reddish Brown Silty Sand fine gypsum crystals intermixed					
	18						
	19						
			15-20 PID: 4.3 ppm				
	20						
	21						
	22						
	23						
		5YR 4/4 - Reddish Brown Clay coarse angular gypsum crystals intermixed Moist					
	24						
			20-25 PID: 8.7 ppm				
	25						

HTW DRILLING LOG

HOLE NO. SS61-SB76C

PROJECT: SS-61 Performance Monitoring

INSPECTOR: Z. Beck

SHEET 3 OF 3 SHEETS

Elev.	Depth.	Description of Materials	Field Screening Results (ppm)	Geotech Sample or Box number	Analytical Sample Number	Blow Counts	Remarks
	25	Same as above					
	26						
	27						
		GLEY 1 6N - Gray Silty Sand Visibly Stained Strong Hydrocarbon Odor					
	28						
	29						
			25-30 PID: 840 ppm		SS61-SB76C-30 @ 1445		
	30						
		End of Boring at 30' bgs					
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

APPENDIX B

Monitoring Well Sample Collection Forms

January 2013
Monitoring Well Sample Collection Forms

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW21	Date: 1/24/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil / Z. Beck
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	21.85	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	33.63	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	11.78	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.88	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
1/24/2013	0752	22.50	7,125	600	18.32	5.75	6.83	2.45	> 1,000	-141	Cloudy, Petroleum odor
1/24/2013	0804	23.10	14,250	600	20.11	5.76	6.75	0.85	241	-195	Clearing, Petroleum odor
1/24/2013	0816	23.17	21,375	600	20.02	5.80	6.76	0.55	87.2	-316	Clear, Petroleum odor
1/24/2013	0828	23.10	28,500	600	19.98	5.83	6.78	0.72	19.2	-284	Clear, Petroleum odor
1/24/2013	0840	23.50	35,625	600	20.04	5.89	6.79	1.17	17.7	-337	Clear, Petroleum odor
1/24/2013	0852	23.52	42,750	600	20.08	5.96	6.83	1.19	6.04	-337	Clear, Petroleum odor
1/24/2013	0904	23.53	49,875	600	20.09	5.97	6.83	1.22	4.41	-341	Clear, Petroleum odor
1/24/2013	0916	23.52	57,000	600	20.13	5.99	6.85	1.24	3.93	-341	Clear, Petroleum odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
920
Sample Identification
SS61-MW21 / SS61-MW21-A

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW23	Date: 1/23/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: Z. Beck
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	21.73	Casing: Type PVC	Diam. (in) 2.00	Weather: Sunny-Warm approx. 70F
	(B) Total Well Depth (ft BTOC):	33.77	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	12.04	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.93	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
1/23/2013	1335	21.73	0	500	21.43	6.46	5.46	3.32	1000+	121	Cloudy
1/23/2013	1350	21.96	7,500	500	22.28	6.43	5.29	0.00	505	146	Clearing-slightly cloudy
1/23/2013	1405	22.02	15,000	500	22.36	6.56	5.30	0.00	72.5	-34	Clear
1/23/2013	1420	22.28	22,500	500	22.47	6.53	5.31	0.00	66.7	-39	Clear
1/23/2013	1435	23.31	30,000	500	22.04	6.54	5.27	0.00	59.5	-37	Clear
1/23/2013	1450	23.11	37,500	500	22.07	6.54	5.23	0.00	29.5	-51	Clear
1/23/2013	1505	22.10	45,000	500	22.11	6.54	5.08	0.00	18.9	-55	Clear

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1530

Sample Identification
SS61-MW23

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW24	Date: 1/23/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil / T. Lucero
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	21.55	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	33.73	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	12.18	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.95	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
1/23/2013	1345	23.35	7,400	700	23.49	7.11	7.70	1.18	629	-277	Cloudy, Petroleum odor
1/23/2013	1355	23.68	14,800	700	23.35	7.11	7.37	0.74	> 1,000	-309	Cloudy, Petroleum odor
1/23/2013	1405	23.80	22,200	700	23.32	7.11	7.08	0.70	742	-301	Cloudy, Petroleum odor
1/23/2013	1415	23.91	29,600	700	23.34	7.09	6.96	0.71	295	-273	Clearing, Petroleum odor
1/23/2013	1425	23.91	37,000	700	23.32	7.04	6.92	0.76	211	-262	Clearing, Petroleum odor
1/23/2013	1435	23.91	44,400	700	23.33	7.02	6.95	0.74	63.1	-260	Clear, Petroleum odor
1/23/2013	1445	23.91	51,800	700	23.33	7.02	6.96	0.72	54.4	-267	Clear, Petroleum odor
											MW is near horizontal sparge well
											likely causing elevated turbidity

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time

1450

Sample Identification

SS61-MW24

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW25	Date: 1/23/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil / T. Lucero
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	18.93	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.16	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	15.23	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.44	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
1/23/2013	1016	19.37	9,250	700	21.24	6.63	5.87	6.29	390	-293	Cloudy, Petroleum odor
1/23/2013	1029	19.37	18,500	700	21.36	6.59	6.16	4.75	14.5	-310	Clear, Petroleum odor
1/23/2013	1042	19.32	27,750	700	21.19	6.54	6.44	3.53	5.02	-256	Clear, Petroleum odor
1/23/2013	1055	19.33	37,000	700	21.25	6.54	6.76	3.42	3.66	-286	Clear, Petroleum odor
1/23/2013	1108	19.32	46,250	700	20.94	6.50	6.74	2.77	3.84	-356	Clear, Petroleum odor
1/23/2013	1121	19.33	55,000	700	21.25	6.50	6.86	2.62	2.18	-446	Clear, Petroleum odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time

1140

Sample Identification

SS61-MW25

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW26	Date: 1/23/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: Z. Beck
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	21.67	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.40	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	12.73	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.04	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
1/23/2013	1050	21.67	0	500	21.33	6.73	5.76	0.00	1000+	-34	Very Cloudy
1/23/2013	1106	24.88	8,000	500	22.49	6.97	5.66	5.41	10.3	4	Clear
1/23/2013	1122	23.24	16,000	500	22.49	6.82	5.57	4.26	10.2	1	Clear
1/23/2013	1138	23.31	24,000	500	22.53	6.82	5.59	4.15	10.9	-46	Clear
1/23/2013	1154	23.60	32,000	500	22.59	6.83	5.60	4.17	10.0	-54	Clear
1/23/2013	1210	23.45	40,000	500	22.55	6.83	5.60	3.94	5.64	-60	Clear

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1215
Sample Identification
SS61-MW26

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW27	Date: 1/23/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil / T. Lucero
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	19.78	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.79	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	15.01	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.40	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
1/23/2013	0815	20.75	9,100	700	21.74	6.61	7.18	0.57	21.2	-165	Clear, Petroleum odor
1/23/2013	0828	20.75	18,200	700	22.02	6.61	6.86	0.26	4.74	-164	Clear, Petroleum odor
1/23/2013	0841	21.50	27,300	700	22.37	6.63	6.29	0.21	1.24	-173	Clear, Petroleum odor
1/23/2013	0854	21.93	36,400	700	22.36	6.59	6.73	0.05	1.95	-214	Clear, Petroleum odor
1/23/2013	0907	21.93	45,500	700	22.35	6.53	6.82	0.00	0.85	-213	Clear, Petroleum odor
1/23/2013	0920	21.93	54,600	700	22.36	6.53	7.05	0.00	0.76	-214	Clear, Petroleum odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time

0930

Sample Identification

SS61-MW27

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW28	Date: 1/23/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: Z. Beck
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	20.72	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.22	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	13.50	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.16	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
1/23/2013	0826	20.72	0	500	18.54	6.37	14.0	0.00	1000+	-20	Milky Borwn
1/23/2013	0842	21.41	8,000	500	20.92	6.29	13.7	0.00	108	-20	Clearing
1/23/2013	0858	21.76	16,000	500	20.93	6.18	13.4	0.00	16.1	-82	Clear
1/23/2013	0914	21.58	24,000	500	21.14	6.19	13.2	0.00	16.3	-86	Clear
1/23/2013	0930	21.74	32,000	500	21.10	6.19	13.3	0.00	21.9	-89	Clear
1/23/2013	0946	21.41	40,000	500	20.81	6.20	13.1	0.00	17.3	-101	Clear

Colorimeter Results				
Time	**Analyte**	**Dilution**	**Result**	**Units**
Sample Time				
1000				
Sample Identification				
SS61-MW28				
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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW29	Date: 1/22/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil / T. Lucero
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	22.97	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.59	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	11.62	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.86	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
1/22/2013	1450	24.05	7,050	700	22.13	7.22	17.2	1.75	61.3	-159	Slightly cloudy, Petroleum odor
1/22/2013	1500	24.26	14,100	700	22.17	6.44	17.2	1.21	7.81	-150	Clear, Petroleum odor
1/22/2013	1510	24.47	21,150	700	22.20	6.35	17.2	0.67	0.80	-149	Clear, Petroleum odor
1/22/2013	1520	24.48	28,200	700	22.19	6.33	17.2	0.57	1.38	-150	Clear, Petroleum odor
1/22/2013	1530	24.48	35,250	700	22.19	6.31	17.2	0.52	0.50	-144	Clear, Petroleum odor
1/22/2013	1540	24.49	42,300	700	22.18	6.31	17.2	0.52	0.40	-141	Clear, Petroleum odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1600
Sample Identification
SS61-MW29

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW30	Date: 1/22/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: Z. Beck
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	24.36	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.29	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	9.93	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.59	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
1/22/2013	1302	24.36	0	500	20.24	6.20	20.2	0.00	327	-19	Slightly Cloudy
1/22/2013	1314	25.99	6,000	500	20.56	6.3	19.1	0.00	11.2	-23	Clear
1/22/2013	1326	25.92	12,000	500	20.64	6.29	19.6	0.00	10.6	-22	Clear
1/22/2013	1338	25.71	18,000	500	21.02	6.26	19.8	0.00	9.76	-21	Clear
1/22/2013	1350	26.29	24,000	500	20.83	6.28	19.7	0.00	12.1	-22	Clear
1/22/2013	1402	26.46	30,000	500	20.68	6.29	19.7	0.00	6.60	-22	Clear
1/22/2013	1414	26.53	36,000	500	20.71	6.28	19.8	0.00	3.60	-22	Clear

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time

1430

Sample Identification

SS61-MW30

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW31	Date: 1/22/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil / T. Lucero
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	Lamotte Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	24.20	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.29	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	10.09	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.61	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
1/22/2013	1311	25.79	6,100	600	20.75	7.21	25.2	7.66	511	-69	Cloudy, Petroleum odor
1/22/2013	1321	27.09	12,200	600	20.84	6.50	25.2	7.14	142	-91	Clearing, Petroleum odor
1/22/2013	1331	27.80	18,300	600	20.78	6.49	25.2	6.72	85.5	-73	Clear, Petroleum odor
1/22/2013	1341	28.12	24,400	600	20.79	6.41	25.2	6.27	35.6	-72	Clear, Petroleum odor
1/22/2013	1351	28.67	30,500	600	20.85	6.41	25.1	6.29	23.9	-76	Clear, Petroleum odor
1/22/2013	1401	28.67	36,600	600	20.86	6.41	25.1	6.27	13.3	-74	Clear, Petroleum odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1410
Sample Identification
SS61-MW31

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

April 2013
Monitoring Well Sample Collection Forms

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW21	Date: 4/10/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: R. Pochel
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	22.15	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	33.10	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	10.95	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.75	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
4/10/2013	1230	22.52	1,750	1000	21.72	6.93	6.86	5.73	1000+	101	Very Cloudy, gray
4/10/2013	1235	21.95	2,750	1000	21.95	6.80	6.84	1.16	1000+	40	Strong odor
4/10/2013	1240	21.95	7,750	1000	21.84	7.07	6.83	1.49	283	-21	
4/10/2013	1245	23.37	12,750	1000	22.14	6.79	6.83	0.74	137	-40	
4/10/2013	1250	23.37	17,750	1000	22.30	6.79	6.80	0.66	50.9	-20	Clearing
4/10/2013	1255	23.37	22,750	1000	22.40	6.80	6.85	0.52	19.8	-129	Clear
4/10/2013	1300	23.37	27,750	1000	22.36	6.81	6.89	0.50	9.5	-160	Clear
4/10/2013	1305	23.37	32,750	1000	22.37	6.81	6.91	0.46	9.4	-197	
4/10/2013	1310	23.37	37,750	1000	22.36	6.82	6.95	0.45	5.2	-218	

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
					3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
Sample Time					2	1 L	Amber	None	N	8270C	SVOC
1320					2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
Sample Identification					1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
SS61-MW21					1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
Conversions	**Stabilization Criteria**				1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%	1	0.5 L	Poly	None	N	5210	BOD
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU	3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
	Cond	+/- 10%	ORP	N/A	1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

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MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW23	Date: 4/10/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: R. Pochel
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	21.84	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	33.77	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	11.93	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.90	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
4/10/2013	1440	22.92	40,000	1000	23.30	7.28	5.33	0.95	32.6	14	Purged approx 10 gallons prior to
4/10/2013	1445	22.92	45,000	1000	23.29	7.22	5.38	0.91	15.1	9	recording parameters
4/10/2013	1450	22.92	50,000	1000	23.25	7.17	5.38	0.92	23.9	9	Very brown water
4/10/2013	1455	23.28	55,000	1000	23.29	7.17	5.38	0.83	12.3	6	Clear
4/10/2013	1500	23.28	60,000	1000	23.32	7.21	5.36	0.72	9.9	3	
4/10/2013	1505	23.28	65,000	1000	23.37	7.16	5.35	0.70	8.9	2	
4/10/2013	1510	23.28	70,000	1000	23.43	7.17	5.33	0.67	3.8	0	Clear
4/10/2013	1515	23.28	75,000	1000	23.50	7.15	5.30	0.53	2.4	-1	
4/10/2013	1520	23.28	80,000	1000	23.49	7.13	5.33	0.52	2.8	0	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1525
Sample Identification
SS61-MW23

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

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MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW24	Date: 4/10/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: T. Lucero
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	22.76	Casing: Type PVC	Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC):	33.50	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	10.54	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.71	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
4/10/2013	1610	22.76	1,000	500	23.41	6.67	5.58	0.89	700	-267.6	
4/10/2013	1620	22.81	6,000	500	23.36	6.75	5.39	0.88	500	-271.1	
4/10/2013	1630	23.46	11,000	500	23.34	6.75	5.38	0.89	350	-272.4	
4/10/2013	1640	24.40	16,000	500	23.34	6.80	5.39	0.90	67	-271.3	
4/10/2013	1650	24.40	21,000	500	23.35	6.81	5.39	0.90	40	-271.4	
4/10/2013	1700	24.40	26,000	500	23.34	6.83	5.37	0.95	30	-274.3	
											MW is near horizontal sparge well
											likely causing elevated turbidity

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
					3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
Sample Time					2	1 L	Amber	None	N	8270C	SVOC
1710					2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
Sample Identification					1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
SS61-MW24					1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
Conversions	**Stabilization Criteria**				1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%	1	0.5 L	Poly	None	N	5210	BOD
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU	3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
	Cond	+/- 10%	ORP	N/A	1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW25	Date: 4/10/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: T. Lucero
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	19.59	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	33.90	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	14.31	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.28	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
4/10/2013	0930	19.86	1,000	500	21.62	6.21	4.69	1,21	450	-161.6	
4/10/2013	0940	20.12	6,000	500	22.01	6.26	4.66	1.03	37	-194.5	
4/10/2013	0950	20.19	11,000	500	22.05	6.24	4.89	1.25	28	-247.8	
4/10/2013	1000	20.25	16,000	500	22.11	6.24	5.21	1.46	7.0	-248.7	
4/10/2013	1010	20.26	21,000	500	22.11	6.24	5.27	1.54	7.0	-250.4	
4/10/2013	1020	20.26	26,000	500	22.15	6.24	5.28	1.54	4.4	-250.6	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1025

Sample Identification
SS61-MW25

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

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MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW26	Date: 4/10/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: T. Lucero
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	22.24	Casing: Type PVC	Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC):	34.18	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	11.94	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.91	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
4/10/2013	1410	23.40	1,000	500	23.44	7.63	4.96	5.44	240	-25.0	
4/10/2013	1420	23.45	6,000	500	23.52	7.63	4.96	6.05	8.8	-17.4	
4/10/2013	1430	23.55	11,000	500	23.59	7.61	4.94	5.98	4.9	-14.8	
4/10/2013	1440	23.60	16,000	500	23.56	7.59	4.92	5.87	3.7	-15.4	
4/10/2013	1450	23.60	21,000	500	23.52	7.58	4.91	5.82	3.7	-20.3	
4/10/2013	1500	23.60	26,000	500	23.50	7.59	4.90	5.82	3.7	-21.4	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1510

Sample Identification
SS61-MW26

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

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MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW27	Date: 4/10/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: R. Pochel
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	23.12	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.80	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	11.68	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.87	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
4/10/2013	0801	23.12	1,250	500	18.96	6.76	0.009	9.39	79.8	73	
4/10/2013	0805	23.12	4,250	1000	21.6	6.72	5.45	1.61	77.4	41	
4/10/2013	0810	23.12	9,250	1000	22.22	6.69	5.17	1.42	61.2	33	
4/10/2013	0815	23.12	14,250	1000	22.29	6.76	5.23	3.26	40.9	58	Clear
4/10/2013	0820	23.12	19,250	1000	22.34	6.76	5.31	2.31	17.8	50	
4/10/2013	0825	23.12	24,250	1000	22.46	6.72	5.61	1.35	5.62	31	
4/10/2013	0830	23.12	29,250	1000	22.37	6.73	5.65	1.27	3.04	28	
4/10/2013	0835	23.12	34,250	1000	22.45	6.70	5.68	1.24	1.67	19	
4/10/2013	0840	23.12	39,250	1000	22.45	6.71	5.70	1.21	1.65	18	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
0840

Sample Identification
SS61-MW27

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW28	Date: 4/10/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: R. Pochel
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	21.50	Casing: Type PVC	Diam. (in) 2.00	Weather: Clear, Warm
	(B) Total Well Depth (ft BTOC):	32.65	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	11.15	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.78	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
4/10/2013	0935	21.50	1,750	1000	24.45	7.61	13.2	8.75	749	151	
4/10/2013	0940	21.50	6,750	1000	21.65	7.59	13.2	8.22	720	152	
4/10/2013	0945	21.50	11,750	1000	21.95	7.53	13.1	7.33	438	156	Cloudy
4/10/2013	0950	21.50	16,750	1000	22.09	7.49	13.1	7.05	364	150	
4/10/2013	0955	21.50	21,750	1000	22.35	7.49	13.0	6.94	158	144	
4/10/2013	1000	21.50	26,750	1000	22.44	7.48	13.0	6.82	112	143	Clear
4/10/2013	1005	21.50	31,750	1000	22.51	7.48	13.0	6.77	88.0	142	
4/10/2013	1010	21.50	36,750	1000	22.57	7.48	13.1	6.78	51.0	141	
4/10/2013	1015	21.50	41,750	1000	22.60	7.48	12.9	6.71	51.9	141	Clear

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time

1020

Sample Identification

SS61-MW28

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW29	Date: 4/9/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: R. Pochel
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	24.50	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.50	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	10.00	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.60	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
4/9/2013	1652	24.50	1,000	1000	21.93	7.70	16.7	7.57	54.5	200	
4/9/2013	1655	25.11	3,000	1000	21.73	7.67	16.7	7.39	53.3	201	
4/9/2013	1700	25.10	8,000	1000	21.79	7.67	16.8	7.10	34.1	195	
4/9/2013	1705	25.20	13,000	1000	21.83	7.63	16.7	7.32	31.3	195	
4/9/2013	1710	25.30	18,000	1000	21.88	7.59	16.7	7.39	25.5	195	
4/9/2013	1715	25.57	23,000	1000	21.94	7.57	16.7	7.26	18.5	197	
4/9/2013	1720	25.68	28,000	1000	21.90	7.54	16.7	7.24	17.0	197	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1725

Sample Identification
SS61-MW29

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW30	Date: 4/9/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: T. Lucero
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	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):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	24.49	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.20	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	9.71	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.55	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
4/9/2013	1515	24.99	1,000	500	21.32	6.36	9.14	2.97	110	53.9	
4/9/2013	1520	24.60	3,500	500	21.48	6.31	14.41	2.12	20	76.9	
4/9/2013	1525	25.10	6,000	500	21.53	6.29	15.86	1.00	13	79.5	
4/9/2013	1530	25.24	8,500	500	21.70	6.28	16.03	0.82	11	80.7	
4/9/2013	1535	25.36	11,000	500	21.65	6.27	16.32	0.56	9.4	82.5	
4/9/2013	1540	25.36	13,500	500	21.80	6.27	16.32	0.54	7.3	82.5	
4/9/2013	1545	25.36	16,000	500	21.82	6.27	16.32	0.48	5.2	82.5	
4/9/2013	1550	25.36	18,500	500	21.80	6.26	16.39	0.49	4.8	82.6	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1600

Sample Identification
SS61-MW30 & SS61-MW30-A

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW31	Date: 4/10/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: T. Lucero
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	Lamotte Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	24.95	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.30	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	9.35	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.49	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
4/10/2013	0745	24.95	1,000	500	19.84	7.21	11.17	4.65	700	140.2	
4/10/2013	0755	25.60	6,000	500	20.52	7.35	11.58	4.64	400	148.4	
4/10/2013	0805	25.70	11,000	500	20.71	7.37	12.17	4.40	200	151.3	
4/10/2013	0815	25.60	16,000	500	20.20	7.38	12.07	4.33	190	152.0	
4/10/2013	0825	25.60	21,000	500	20.24	7.37	11.95	4.27	160	153.5	
4/10/2013	0835	25.60	26,000	500	20.88	7.38	11.88	4.12	130	150.0	
											MW is near horizontal sparge well
											likely causing elevated turbidity

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
0845

Sample Identification
SS61-MW31

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

July 2013
Monitoring Well Sample Collection Forms

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW21	Date: 7/17/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Heron	Other Equipment:	Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	21.11	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	33.19	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	12.08	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.93	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
7/17/2013	1335	21.11	0	1000	22.13	7.29	6.95	3.59	942	-117	Cloudy, strong odor
7/17/2013	1343	22.40	7,400	1000	22.40	7.26	6.89	2.82	>1,000	-130	Cloudy, strong odor
7/17/2013	1351	22.31	14,800	1000	22.57	7.24	6.87	0.73	219	-172	Cloudy, strong odor
7/17/2013	1359	22.31	22,200	1000	22.59	7.23	6.86	0.00	34.4	-185	Clear, strong odor
7/17/2013	1407	22.23	29,600	1000	23.00	7.21	6.88	0.00	19.8	-217	Clear, strong odor
7/17/2013	1415	22.52	37,000	1000	22.84	7.20	6.89	0.00	18.7	-214	Clear, strong odor
7/17/2013	1423	22.56	44,400	1000	22.90	7.20	6.89	0.00	8.35	-227	Clear, strong odor
7/17/2013	1431	22.54	51,800	1000	22.86	7.19	6.90	0.00	7.91	-254	Clear, strong odor
											GW temp affected by ambient temp

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1450
Sample Identification
SS61-MW21

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW23	Date: 7/17/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: Z. Beck
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Heron	Other Equipment:	Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	20.56	Casing: Type PVC	Diam. (in) 2.00	Weather: Partly cloudy, Upper 80s deg F
	(B) Total Well Depth (ft BTOC):	32.41	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	11.85	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.89	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
7/17/2013	1338	20.56	0	1000	23.04	7.29	5.51	13.22	>1,000	96	Very turbid
7/17/2013	1346	21.46	8,000	1000	23.64	7.18	5.43	9.27	>1,000	120	Very turbid
7/17/2013	1352	21.62	16,000	1000	22.96	7.21	5.47	8.46	>1,000	125	Very turbid
7/17/2013	1400	21.50	24,000	1000	23.24	7.20	5.44	7.46	989	124	Very turbid
7/17/2013	1408	21.61	32,000	1000	22.98	7.24	5.46	6.83	739	121	Slightly cloudy
7/17/2013	1416	21.64	40,000	1000	22.94	7.23	5.44	6.12	582	120	Slightly cloudy
7/17/2013	1424	21.90	48,000	1000	22.61	7.26	5.48	5.69	604	119	Slightly cloudy
7/17/2013	1432	22.01	56,000	1000	22.63	7.25	5.45	5.13	>1,000	116	Horizontal Air Sparge Well turned on
7/17/2013	1440	21.82	64,000	1000	22.78	7.23	5.41	4.61	371	113	Slightly cloudy

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1530
Sample Identification
SS61-MW23

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: SS-61	Location ID: SS61-MW23	Date: 7/17/2013
	Project Name: Performance Monitoring	Project No./Phase: 9100133.01.120	Recorded By: Z. Beck

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mL)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
7/17/2013	1448	21.85	72,000	1000	22.68	7.26	5.44	4.28	322	112	Slightly cloudy
7/17/2013	1456	21.86	80,000	1000	22.67	7.26	5.44	3.91	275	112	Slightly cloudy
7/17/2013	1504	21.82	88,000	1000	22.72	7.26	5.43	3.60	189	112	Clear
7/17/2013	1512	21.83	96,000	1000	22.72	7.26	5.43	3.41	88.1	112	Clear
7/17/2013	1520	21.92	104,000	1000	22.6	7.27	5.44	3.45	165	112	Clear

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW24	Date: 7/17/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Heron	Other Equipment:	Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	20.93	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	33.31	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	12.38	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.98	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
7/17/2013	0942	20.93	0	1000	23.00	6.96	6.26	2.51	586	-171.0	Cloudy, petrol odor
7/17/2013	0950	22.65	7,500	1000	23.05	6.93	6.38	1.11	32.7	-172.0	Clear, petrol odor
7/17/2013	0958	22.62	15,000	1000	23.17	6.95	6.36	0.37	18.0	-196.0	Clear, petrol odor
7/17/2013	1006	22.49	22,500	1000	23.15	6.97	6.27	0.00	20.1	-212	Clear, petrol odor
7/17/2013	1014	21.15	30,000	1000	22.95	7.02	6.14	0.06	505	-206	Horizontal Air Sparge Well turned on
7/17/2013	1022	20.50	37,500	1000	22.88	7.07	6.17	1.08	223	-189	Cloudy, petrol odor
7/17/2013	1030	20.24	45,000	1000	22.90	7.08	6.21	2.28	276	-165	Cloudy, petrol odor

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
					3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
Sample Time					2	1 L	Amber	None	N	8270C	SVOC
1050					2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
Sample Identification					1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
SS61-MW24					1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
Conversions	**Stabilization Criteria**				1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%	1	0.5 L	Poly	None	N	5210	BOD
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU	3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
	Cond	+/- 10%	ORP	N/A	1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW25	Date: 7/18/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil / Z. Beck
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Heron	Other Equipment:	Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	18.11	Casing: Type PVC	Diam. (in) 2.00	Weather: Mostly Cloudy, light rain
	(B) Total Well Depth (ft BTOC):	34.16	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	16.05	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.57	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
7/18/2013	0740	18.11	0	1000	21.82	7.01	5.33	0.00	>1,000	-155	Cloudy, petrol odor,
7/18/2013	0750	18.55	9,800	1000	21.80	6.98	5.70	0.00	49.2	-255	Clearing, petrol odor
7/18/2013	0800	19.07	19,600	1000	21.62	6.97	5.96	0.00	15.3	-271	Clear, petrol odor
7/18/2013	0810	19.06	29,400	1000	21.61	7.02	6.09	0.00	7.13	-280	Clear, petrol odor
7/18/2013	0820	19.06	39,200	1000	21.63	7.03	6.19	0.00	2.54	-309	Clear, petrol odor
7/18/2013	0830	19.35	49,000	1000	21.59	7.04	6.29	0.00	3.50	-334	Clear, petrol odor
7/18/2013	0840	19.00	58,800	1000	21.66	7.05	6.33	0.00	2.38	-350	Clear, petrol odor
7/18/2013	0850	19.25	68,600	1000	21.61	7.04	6.32	0.00	1.46	-365	Clear, petrol odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
0900
Sample Identification
SS61-MW25 / SS61-MW25-A

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW26	Date: 7/17/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: Z. Beck
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Heron	Other Equipment:	Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	21.04	Casing: Type PVC	Diam. (in) 2.00	Weather: Partly Cloudy, appox 70 deg F
	(B) Total Well Depth (ft BTOC):	34.23	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	13.19	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.11	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
7/17/2013	0748	21.04	0	1000	22.31	7.63	5.46	11.90	74.4	41	Slight petrol odor, clear
7/17/2013	0756	22.62	8,000	1000	22.46	7.51	5.41	8.13	5.91	51	Slight petrol odor, clear
7/17/2013	0804	22.52	16,000	1000	22.47	7.51	5.40	7.42	5.63	38	Slight petrol odor, clear
7/17/2013	0812	22.72	24,000	1000	22.47	7.45	5.42	6.97	2.36	-30	Slight petrol odor, clear
7/17/2013	0820	22.75	32,000	1000	22.42	7.41	5.43	6.92	1.49	-65	Slight petrol odor, clear
7/17/2013	0828	22.76	40,000	1000	22.45	7.39	5.42	6.75	1.15	-84	Slight petrol odor, clear
7/17/2013	0836	22.83	48,000	1000	22.49	7.36	5.43	6.48	1.18	-99	Slight petrol odor, clear
7/17/2013	0844	22.89	56,000	1000	22.49	7.35	5.43	6.21	1.21	-110	Slight petrol odor, clear
7/17/2013	0852	22.89	64,000	1000	22.48	7.35	5.43	6.22	1.29	-118	Slight petrol odor, clear

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
0915
Sample Identification
SS61-MW26

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW27	Date: 7/17/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Heron	Other Equipment:	Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	20.51	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.82	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	14.31	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.29	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
7/17/2013	0750	20.51	0	1000	22.05	7.43	5.37	4.01	27.6	-41	Clear, Slight petrol odor
7/17/2013	0759	21.48	8,700	1000	22.19	7.32	5.47	0.00	7.47	-46	Clear, Slight petrol odor
7/17/2013	0808	21.85	17,400	1000	22.09	7.17	6.18	0.00	9.26	-64	Clear, Slight petrol odor
7/17/2013	0817	21.62	26,100	1000	22.15	7.06	6.66	0.00	4.09	-75	Clear, Slight petrol odor
7/17/2013	0826	22.05	34,800	1000	22.11	7.03	7.33	0.00	2.58	-77	Clear, Slight petrol odor
7/17/2013	0835	22.09	43,500	1000	22.15	7.02	7.30	0.00	1.60	-81	Clear, Slight petrol odor
7/17/2013	0844	22.07	52,200	1000	22.17	7.02	7.34	0.00	1.36	-80	Clear, Slight petrol odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
0900
Sample Identification
SS61-MW27

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW28	Date: 7/16/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Heron	Other Equipment:	Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	20.70	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	32.45	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	11.75	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.88	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
7/16/2013	1400	20.70	0	900	22.49	7.36	13.9	10.46	182	-8	Clear, slight petrol odor
7/16/2013	1408	21.35	7,200	900	22.48	7.26	13.7	4.16	10.3	-83	Clear, slight petrol odor
7/16/2013	1416	21.29	14,400	900	22.84	7.22	13.7	1.54	2.66	-90	Clear, slight petrol odor
7/16/2013	1424	21.32	21,600	900	22.52	7.21	13.6	0.95	4.20	-108	Clear, slight petrol odor
7/16/2013	1432	21.26	28,800	900	22.66	7.20	13.6	0.48	3.19	-112	Clear, slight petrol odor
7/16/2013	1440	21.28	36,000	900	22.58	7.21	13.6	0.50	2.82	-110	Clear, slight petrol odor
7/16/2013	1448	21.30	43,200	900	22.61	7.20	13.6	0.46	2.57	-112	Clear, slight petrol odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1510
Sample Identification
SS61-MW28

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW29	Date: 7/16/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: Z. Beck
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Heron	Other Equipment:	Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	22.55	Casing: Type PVC	Diam. (in) 2.00	Weather: Sunny, temps in upper 80 deg F
	(B) Total Well Depth (ft BTOC):	34.63	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	12.08	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.93	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
7/16/2013	1334	22.55	0	1000	22.25	6.96	17.2	9.12	114	59	Slightly Cloudy
7/16/2013	1342	23.83	8,000	1000	22.28	6.95	17.4	2.92	15.3	84	Clear
7/16/2013	1350	24.01	16,000	1000	22.15	6.95	17.5	2.05	5.98	92	Clear
7/16/2013	1358	24.02	24,000	1000	22.17	6.95	17.5	1.68	4.63	103	Clear
7/16/2013	1406	24.01	32,000	1000	22.26	6.94	17.5	1.53	1.76	101	Clear
7/16/2013	1414	24.18	40,000	1000	21.99	6.95	17.5	1.53	4.33	93	Clear
7/16/2013	1422	24.19	48,000	1000	22.21	6.94	17.5	1.43	1.63	92	Clear
7/16/2013	1430	24.04	56,000	1000	22.53	6.93	17.5	1.33	1.35	96	Clear
7/16/2013	1438	24.66	64,000	1000	21.85	6.94	17.5	1.38	1.32	81	Clear

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1500
Sample Identification
SS61-MW29

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW30	Date: 7/16/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: D. McNeil
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Heron	Other Equipment:	Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	23.84	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.21	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	10.37	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.66	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
7/16/2013	0924	23.84	0	1000	21.28	7.47	19.6	5.05	527	74	Cloudy, no odor
7/16/2013	0931	26.18	6,300	1000	20.98	7.22	18.5	2.01	38.5	90	Clear, no odor
7/16/2013	0938	26.79	12,600	1000	21.03	7.14	19.2	0.00	19.9	85	Clear, no odor
7/16/2013	0945	27.04	18,900	1000	20.92	7.11	19.3	0.00	16.7	82	Clear, no odor
7/16/2013	0952	26.98	25,200	1000	21.01	7.10	19.4	0.00	14.1	76	Clear, no odor
7/16/2013	0959	27.02	31,500	1000	21.04	7.10	19.3	0.00	13.8	69	Clear, no odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1015
Sample Identification
SS61-MW30

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW31	Date: 7/16/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: Z. Beck
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Heron	Other Equipment:	Lamotte Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	23.77	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.29	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	10.52	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.68	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
7/16/2013	0925	23.77	0	1000	19.94	7.58	25.1	15.23	682	58	Turbid
7/16/2013	0932	25.79	7,000	1000	19.90	7.50	25.1	7.36	64.1	78	Clearing
7/16/2013	0939	25.88	14,000	1000	20.07	7.49	25.0	6.14	30.6	87	Clear
7/16/2013	0946	26.62	21,000	1000	19.76	7.49	25.1	5.97	42.2	91	
7/16/2013	0953	26.73	28,000	1000	19.79	7.44	25.1	5.45	24.5	94	
7/16/2013	1000	27.06	35,000	1000	19.73	7.38	25.0	5.39	25.1	93	
7/16/2013	1007	27.34	42,000	1000	19.76	7.34	25.0	5.08	26.5	96	
7/16/2013	1014	27.61	49,000	1000	19.75	7.33	25.0	5.03	29.9	99	
7/16/2013	1021	27.4	56,000	1000	19.80	7.33	25.0	4.99	29.2	107	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1030
Sample Identification
SS61-MW31

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

October 2013
Monitoring Well Sample Collection Forms

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW21	Date: 10/23/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: DM
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	HACH 2100Q Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	19.42	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	32.91	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	13.49	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.16	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
10/23/2013	1331	19.42	Initial	1,000	22.73	6.86	8.32	5.04	438	-282	Cloudy, strong odor
10/23/2013	1340	20.71	8,200	1,000	22.54	6.78	8.33	2.74	610	-304	Cloudy, strong odor
10/23/2013	1349	20.77	16,400	1,000	22.63	6.72	8.30	1.12	169	-329	Clearing, strong odor
10/23/2013	1358	20.52	24,600	1,000	22.96	6.65	8.36	0.53	51.9	-333	Clear, strong odor
10/23/2013	1407	20.70	32,800	1,000	22.91	6.69	8.23	0.17	32.4	-341	Clear, strong odor
10/23/2013	1416	20.76	41,000	1,000	22.54	6.69	8.25	0.00	10.3	-343	Clear, strong odor
10/23/2013	1425	20.95	49,200	1,000	22.58	6.71	8.21	0.00	14.2	-348	Clear, strong odor
10/23/2013	1434	21.05	57,400	1,000	22.62	6.65	8.18	0.00	6.89	-347	Clear, strong odor
10/23/2013	1443	20.97	65,600	1,000	22.74	6.66	8.16	0.00	8.41	-349	Clear, strong odor
											GW temp affected by ambient temp

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1450
Sample Identification
SS61-MW21

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW23	Date: 10/24/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: DM
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	HACH 2100Q Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	19.13	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	32.12	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	12.99	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.08	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
10/24/2013	0814	19.13	Initial	1,000	20.54	7.45	6.74	7.15	> 1,000	-223	Cloudy, strong odor
10/24/2013	0822	20.14	7,900	1,000	21.65	7.31	6.34	5.37	> 1,000	-232	Cloudy, strong odor
10/24/2013	0830	20.17	15,800	1,000	21.71	7.30	6.25	4.10	264	-241	Clearing, strong odor
10/24/2013	0838	20.12	23,700	1,000	21.73	7.26	6.20	3.28	89.1	-242	Clear, strong odor
10/24/2013	0846	20.09	31,600	1,000	21.76	7.14	6.18	2.38	43.5	-242	Clear, strong odor
10/24/2013	0854	20.05	39,500	1,000	21.74	7.15	6.17	1.89	21.1	-243	Clear, strong odor
10/24/2013	0902	19.99	47,400	1,000	21.74	7.17	6.16	1.59	25.1	-244	Clear, strong odor
10/24/2013	0910	19.98	55,300	1,000	21.75	7.14	6.15	1.27	17.5	-245	Clear, strong odor
10/24/2013	0918	20.01	63,200	1,000	21.76	7.12	6.14	1.07	11.7	-246	Clear, strong odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
930
Sample Identification
SS61-MW23

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW24	Date: 10/23/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: DM
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	HACH 2100Q Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	17.88	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	32.86	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	14.98	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.40	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
10/23/2013	1105	17.88	Initial	1,000	21.49	6.86	9.68	6.23	391	-322	Cloudy, strong odor
10/23/2013	1114	19.10	9,100	1,000	22.24	6.82	9.66	4.55	32.9	-326	Clear, strong odor
10/23/2013	1123	19.04	18,200	1,000	22.37	6.78	9.64	3.31	17.5	-328	Clear, strong odor
10/23/2013	1132	19.40	27,300	1,000	22.39	6.75	9.53	2.51	17.2	-327	Clear, strong odor
10/23/2013	1141	19.66	36,400	1,000	22.42	6.73	9.35	1.82	15.3	-332	Clear, strong odor
10/23/2013	1150	19.82	45,500	1,000	22.40	6.74	9.15	1.33	20.5	-336	Clear, strong odor
10/23/2013	1159	19.80	54,600	1,000	22.45	6.77	8.99	0.96	14.6	-338	Clear, strong odor
10/23/2013	1208	19.85	63,700	1,000	22.50	6.74	8.93	0.65	11.8	-337	Clear, strong odor
10/23/2013	1217	19.84	72,800	1,000	22.51	6.75	8.85	0.42	9.60	-337	Clear, strong odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1220
Sample Identification
SS61-MW24

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW25	Date: 10/23/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: DM
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	HACH 2100Q Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	15.65	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	33.95	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	18.30	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.93	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
10/23/2013	0823	15.65	Initial	1,000	21.02	6.56	6.10	2.90	356	-69	Cloudy, strong odor
10/23/2013	0834	16.47	11,100	1,000	21.67	6.53	6.60	2.60	25.6	-197	Clear, strong odor
10/23/2013	0845	16.55	22,200	1,000	21.70	6.53	6.53	1.67	11.0	-241	Clear, strong odor
10/23/2013	0856	16.57	33,300	1,000	21.70	6.61	6.88	0.80	4.23	-279	Clear, strong odor
10/23/2013	0907	16.57	44,400	1,000	21.72	6.56	6.97	0.21	3.17	-302	Clear, strong odor
10/23/2013	0918	16.52	55,500	1,000	21.73	6.53	7.05	0.00	1.98	-327	Clear, strong odor
10/23/2013	0929	16.60	66,600	1,000	21.73	6.50	7.08	0.00	1.72	-353	Clear, strong odor
10/23/2013	0940	16.65	77,700	1,000	21.74	6.43	7.15	0.00	1.45	-364	Clear, strong odor
10/23/2013	0951	16.64	88,800	1,000	21.74	6.46	7.16	0.00	1.55	-373	Clear, strong odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1000

Sample Identification
SS61-MW25 / SS61-MW25-A

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW26	Date: 10/22/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: DM
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	HACH 2100Q Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	19.60	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.02	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	14.42	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.31	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
10/22/2013	1334	19.60	Initial	1,000	23.15	7.31	5.91	9.49	> 1,000	-47	Cloudy, mild odor
10/22/2013	1343	20.05	8,800	1,000	23.21	7.49	5.86	9.50	423	53	Clearing, mild odor
10/22/2013	1352	20.13	17,600	1,000	23.12	7.48	5.84	9.66	156	54	Clearing, mild odor
10/22/2013	1401	20.11	26,400	1,000	23.07	7.49	5.84	9.69	99.7	29	Clearing, mild odor
10/22/2013	1410	20.09	35,200	1,000	23.06	7.48	5.84	9.68	70.0	16	Clear, mild odor
10/22/2013	1419	20.08	44,000	1,000	23.06	7.45	5.86	9.72	45.9	10	Clear, mild odor
10/22/2013	1428	20.07	52,800	1,000	23.02	7.50	5.86	9.72	49.8	-1	Clear, mild odor
10/22/2013	1437	20.05	61,600	1,000	23.04	7.48	5.86	9.72	26.6	1	Clear, mild odor
10/22/2013	1446	20.06	70,400	1,000	23.03	7.46	5.86	9.71	18.5	-1	Clear, mild odor
											Elevated DO due to close proximity of Horizontal Air Sparge Well

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1450
Sample Identification
SS61-MW26

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW27	Date: 10/22/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: DM
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	HACH 2100Q Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	20.23	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.55	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	14.32	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.29	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
10/22/2013	1140	20.23	Initial	1,000	22.19	6.68	6.61	8.57	45.1	-68	Clear, mild odor
10/22/2013	1149	20.42	8,700	1,000	22.34	6.52	7.58	5.37	18.9	-68	Clear, mild odor
10/22/2013	1158	20.41	17,400	1,000	22.35	6.47	7.89	3.74	13.7	-67	Clear, mild odor
10/22/2013	1207	20.39	26,100	1,000	22.41	6.48	8.42	2.27	11.6	-68	Clear, mild odor
10/22/2013	1216	20.32	34,800	1,000	22.40	6.48	8.15	1.47	15.0	-67	Clear, mild odor
10/22/2013	1225	20.40	43,500	1,000	22.39	6.43	8.20	0.92	12.6	-65	Clear, mild odor
10/22/2013	1234	20.39	52,200	1,000	22.40	6.47	8.35	0.60	8.23	-66	Clear, mild odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1245
Sample Identification
SS61-MW27

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW28	Date: 10/22/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: DM
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	HACH 2100Q Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	19.30	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	32.27	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	12.97	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.08	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
10/22/2013	0944	19.30	Initial	1,000	20.97	6.66	16.9	8.09	60.8	-20	Clear, moderate odor
10/22/2013	0952	20.31	7,900	1,000	21.31	6.65	16.1	5.58	12.9	-83	Clear, moderate odor
10/22/2013	1000	20.38	15,800	1,000	21.34	6.66	15.6	4.16	5.85	-100	Clear, moderate odor
10/22/2013	1008	20.40	23,700	1,000	21.38	6.64	15.5	2.91	2.81	-108	Clear, moderate odor
10/22/2013	1016	20.45	31,600	1,000	21.39	6.60	15.4	1.75	1.97	-112	Clear, moderate odor
10/22/2013	1024	20.44	39,500	1,000	21.39	6.65	15.3	1.20	1.34	-119	Clear, moderate odor
10/22/2013	1032	20.43	47,400	1,000	21.43	6.67	15.2	0.91	1.28	-117	Clear, moderate odor
10/22/2013	1040	20.43	55,300	1,000	21.45	6.66	15.2	0.64	1.03	-125	Clear, moderate odor
10/22/2013	1048	20.43	63,200	1,000	21.45	6.66	15.1	0.52	0.96	-123	Clear, moderate odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time

1050

Sample Identification

SS61-MW28

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW29	Date: 10/22/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: DM
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	HACH 2100Q Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	21.49	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.38	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	12.89	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	2.06	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
10/22/2013	0804	21.49	Initial	1,000	20.14	6.68	20.9	8.10	77.5	218	Clear, no odor
10/22/2013	0812	22.95	7,800	1,000	20.74	6.69	20.9	6.17	38.4	149	Clear, no odor
10/22/2013	0820	23.22	15,600	1,000	20.78	6.67	20.9	4.85	7.39	117	Clear, no odor
10/22/2013	0828	23.22	23,400	1,000	20.78	6.66	21.0	3.57	2.54	113	Clear, no odor
10/22/2013	0836	23.36	31,200	1,000	20.81	6.65	21.0	2.74	1.20	111	Clear, no odor
10/22/2013	0844	23.36	39,000	1,000	20.75	6.67	21.0	2.31	0.98	110	Clear, no odor
10/22/2013	0852	23.36	46,800	1,000	20.71	6.67	21.1	1.93	0.74	111	Clear, no odor
10/22/2013	0900	23.36	54,600	1,000	20.73	6.67	21.0	1.68	0.70	111	Clear, no odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
900
Sample Identification
SS61-MW29

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW30	Date: 10/21/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: DM
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	HACH 2100Q Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	22.98	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	33.99	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	11.01	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.76	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
10/21/2013	1153	22.98	Initial	1,000	20.67	6.68	21.9	8.31	213	189	Cloudy, no odor
10/21/2013	1200	24.43	6,700	1,000	20.95	6.74	18.6	7.80	17.7	171	Clear, no odor
10/21/2013	1207	24.41	13,400	1,000	21.05	6.68	20.5	7.17	6.55	173	Clear, no odor
10/21/2013	1214	24.44	20,100	1,000	21.21	6.63	22.6	6.32	3.32	174	Clear, no odor
10/21/2013	1221	24.42	26,800	1,000	21.14	6.63	22.7	5.66	3.04	174	Clear, no odor
10/21/2013	1228	24.42	33,500	1,000	21.10	6.64	22.5	5.25	3.12	174	Clear, no odor
10/21/2013	1235	24.43	40,200	1,000	21.12	6.63	22.6	5.19	3.06	174	Clear, no odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1240
Sample Identification
SS61-MW30

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site:	SS-61	Location ID:	SS61-MW31	Date: 10/21/2013
	Project Name:	Performance Monitoring	Project No./Phase:	9100133.01.120	Recorded By: DM
EQUIPMENT	Pump Type:	Stainless Steel Monsoon (Submersible)	Water Quality Meter:	Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type:	Solinst	Other Equipment:	HACH 2100Q Turbidity Meter	Decon Method: Liquinox soap & DI water rinse
	Tubing Type/Diameter (in):	1/2" OD Poly	Other Equipment:		PPE Level: **D** C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC):	22.77	Casing: Type PVC	Diam. (in) 2.00	Weather:
	(B) Total Well Depth (ft BTOC):	34.05	(E) Casing Volume Multiplier (gal/lin ft):	0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A):	11.28	Screen Length (lin ft):	15.00	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E):	1.80	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/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (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.)
10/21/2013	1025	22.77	Initial	1,000	19.18	7.09	29.9	4.60	357	207	Cloudy, no odor
10/21/2013	1032	24.36	6,900	1,000	19.62	7.11	29.8	4.03	64.0	267	Clear, no odor
10/21/2013	1039	24.72	13,800	1,000	19.97	7.09	29.7	5.23	67.2	271	Clear, no odor
10/21/2013	1046	25.09	20,700	1,000	19.83	7.09	29.6	4.85	69.8	291	Clear, no odor
10/21/2013	1053	25.45	27,600	1,000	19.88	7.08	29.6	4.51	50.4	274	Clear, no odor
10/21/2013	1100	25.56	34,500	1,000	19.90	7.07	29.6	4.23	25.0	257	Clear, no odor
10/21/2013	1107	25.65	41,400	1,000	19.92	7.07	29.6	4.02	10.6	246	Clear, no odor

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1115
Sample Identification
SS61-MW31

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

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
3	40 ml	VOAs	HCl	N	8260B	VOCs
3	40 ml	VOAs	HCl	N	8015	TPH (GRO)
2	1 L	Amber	None	N	8270C	SVOC
2	1 L	Amber	H_2SO_4	N	8015	TPH (DRO-ORO)
1	1 L	Poly	None	N	9056/2540	Fe (ferrous/ferric), SO_4, TDS, NO_3
1	0.5 L	Poly	HNO_3	Y	6010	Dissolved - Manganese
1	0.5 L	Poly	HNO_3	N	6010	Total - Manganese
1	0.5 L	Poly	None	N	5210	BOD
3	0.25 L	Poly	NaOH ZnAC	N	4500	H_2S
1	1 L	Poly	H_2SO_4	N	351.2/410.4	AMN, TKN, COD

APPENDIX C

Laboratory Analytical Results
(Provided on Enclosed CD)

Southeast ACCUTEST LABORATORIES

02/07/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA1125

Sampling Dates: 01/22/13 - 01/23/13

Report to:

Bhate Environmental Associates, Inc.

zbeck@bhate.com

ATTN: Zack Beck

Total number of pages in report: **122**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), AK, AR, GA, KY, MA, NV, OK, UT, VA, WA, WI

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Accutest LabLink@20:07 07-Feb-2013

Sample Summary

Bhate Environmental

Job No: FA1125

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA1125-1	01/23/13	09:30	TL	01/24/13	AQ	Ground Water	SS61-MW27
FA1125-1F	01/23/13	09:30	TL	01/24/13	AQ	Groundwater Filtered	SS61-MW27
FA1125-2	01/23/13	00:00	TL	01/24/13	AQ	Trip Blank Water	TRIP BLANK
FA1125-3	01/23/13	11:40	TL	01/24/13	AQ	Ground Water	SS61-MW25
FA1125-3F	01/23/13	11:40	TL	01/24/13	AQ	Groundwater Filtered	SS61-MW25
FA1125-4	01/23/13	00:00	TL	01/24/13	AQ	Trip Blank Water	TRIP BLANK
FA1125-5	01/23/13	10:00	TL	01/24/13	AQ	Ground Water	SS61-MW28
FA1125-5F	01/23/13	10:00	TL	01/24/13	AQ	Groundwater Filtered	SS61-MW28
FA1125-6	01/23/13	00:00	TL	01/24/13	AQ	Trip Blank Water	TRIP BLANK
FA1125-7	01/22/13	16:00	TL	01/24/13	AQ	Ground Water	SS61-MW29
FA1125-7F	01/22/13	16:00	TL	01/24/13	AQ	Groundwater Filtered	SS61-MW29
FA1125-8	01/22/13	00:00	TL	01/24/13	AQ	Trip Blank Water	TRIP BLANK
FA1125-9	01/22/13	14:30	TL	01/24/13	AQ	Ground Water	SS61-MW30

Accutest LabLink@20:07 07-Feb-2013

Sample Summary
(continued)

Bhate Environmental

Job No: FA1125

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA1125-9F	01/22/13	14:30	TL	01/24/13	AQ	Groundwater Filtered	SS61-MW30
FA1125-10	01/22/13	00:00	TL	01/24/13	AQ	Trip Blank Water	TRIP BLANK
FA1125-11	01/22/13	14:10	TL	01/24/13	AQ	Ground Water	SS61-MW31
FA1125-11F	01/22/13	14:10	TL	01/24/13	AQ	Groundwater Filtered	SS61-MW31
FA1125-12	01/22/13	00:00	TL	01/24/13	AQ	Trip Blank Water	TRIP BLANK
FA1125-13	01/23/13	12:15	TL	01/24/13	AQ	Ground Water	SS61-MW26
FA1125-13F	01/23/13	12:15	TL	01/24/13	AQ	Groundwater Filtered	SS61-MW26
FA1125-14	01/23/13	00:00	TL	01/24/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA1125

Site: Holloman AFB; SS61 VCM **Report Date** 2/7/2013 2:32:34 PM

7 Samples and 7 Trip Blanks were collected between 01/22/2013 and 01/23/2013 and were received at Accutest on 01/24/2013 properly preserved, at 3 Deg. C and intact. These Samples received an Accutest job number of FA1125. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VB3631

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1224-5MS, FA1224-5MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acrolein are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated sample; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for Acrolein are outside control limits. Probable cause due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Dichlorodifluoromethane, p-Dichlorobenzene, Trichloroethylene are outside control limits. Probable cause due to matrix interference.

RPD(s) for MSD for 1,1-Dichloroethane, Acetone, Chlorobenzene, m,p-Xylene, trans-1,2-Dichloroethylene are outside control limits for sample FA1224-5MSD. Probable cause due to sample homogeneity.

FA1125-3 for Acrolein: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VC3676

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-5MS, FA1125-5MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acetone are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Probable cause due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, Isopropylbenzene are outside control limits. Probable cause due to matrix interference.

RPD(s) for MSD for 1,1,1-Trichloroethane, 1,1-Dichloroethylene, 2-Chloroethyl vinyl ether, cis-1,2-Dichloroethylene, Hexane, trans-1,2-Dichloroethylene are outside control limits for sample FA1125-5MSD. Probable cause due to sample non-homogeneity.

FA1125-1 for Acetone: Associated BS recovery outside control limits.

FA1125-2 for Acetone: Associated BS recovery outside control limits.

FA1125-4 for Acetone: Associated BS recovery outside control limits.

FA1125-5 for Acetone: Associated BS recovery outside control limits.

FA1125-6 for Acetone: Associated BS recovery outside control limits.

FA1125-7 for Acetone: Associated BS recovery outside control limits.

FA1125-8 for Acetone: Associated BS recovery outside control limits.

FA1125-9 for Acetone: Associated BS recovery outside control limits.

FA1125-10 for Acetone: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VP528

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1176-5MS, FA1176-5MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for 2-Hexanone, Acetone, Methyl ethyl ketone are outside control limits. Blank Spike recoveries are biased high. Analytes are non-detect in associated samples; therefore data integrity is not compromised.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VP528

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, Benzene, cis-1,3-Dichloropropene, Isopropylbenzene are outside control limits. Probable cause due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethylene, 2-Chloroethyl vinyl ether, Benzene, cis-1,3-Dichloropropene, Isopropylbenzene, trans-1,3-Dichloropropene are outside control limits. Probable cause due to matrix interference.

RPD(s) for MSD for 2-Chloroethyl vinyl ether, Carbon disulfide, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene are outside control limits for sample FA1176-5MSD. Probable cause due to sample non-homogeneity.

FA1125-12 for 2-Hexanone: Associated BS recovery outside control limits.

FA1125-12 for Acetone: Associated BS recovery outside control limits.

FA1125-12 for Methyl ethyl ketone: Associated BS recovery outside control limits.

FA1125-13 for 2-Hexanone: Associated BS recovery outside control limits.

FA1125-13 for Acetone: Associated BS recovery outside control limits.

FA1125-13 for Methyl ethyl ketone: Associated BS recovery outside control limits.

FA1125-14 for 2-Hexanone: Associated BS recovery outside control limits.

FA1125-14 for Acetone: Associated BS recovery outside control limits.

FA1125-14 for Methyl ethyl ketone: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VP529

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1188-1MS, FA1188-1MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acetone are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated sample; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Probable cause due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene are outside control limits. Probable cause due to matrix interference.

RPD(s) for MSD for 2-Chloroethyl vinyl ether, Bromodichloromethane, Carbon tetrachloride, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene are outside control limits for sample FA1188-1MSD. Probable cause due to sample non-homogeneity.

FA1125-11 for Acetone: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VP530

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1426-2MS, FA1426-2MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP45379

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1140-4MS, FA1140-4MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** OP45409

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1223-6MS was used as the QC samples indicated.

Matrix Spike Recovery(s) for Pyridine are outside control limits. Probable cause due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

OP45409-MS: MSD not available due to loss during sample extraction.

Sample(s) FA1125-5, OP45409-MS have surrogates outside control limits. Probable cause due to matrix interference.

FA1125-3: Dilution required due to matrix interference.

FA1125-5: Dilution required due to matrix interference.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD4905

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-5MS, FA1125-5MSD were used as the QC samples indicated.

Sample(s) FA1125-1, FA1125-5, FA1125-5MS, FA1125-5MSD have surrogates outside control limits. Probable cause due to matrix interference.

FA1125-1 for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

FA1125-1 for aaa-Trifluorotoluene: Result reported from PID.

FA1125-5 for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

FA1125-5 for aaa-Trifluorotoluene: Result reported from PID.

FA1125-5MS for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

FA1125-5MS for aaa-Trifluorotoluene: Result reported from PID.

FA1125-5MSD for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

FA1125-5MSD for aaa-Trifluorotoluene: Result reported from PID.

Matrix: AQ **Batch ID:** GCD4907

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-7MS, FA1125-7MSD were used as the QC samples indicated.

Sample(s) FA1125-7MS, FA1125-7MSD have surrogates outside control limits. Probable cause due to matrix interference.

FA1125-7MS for aaa-Trifluorotoluene: Outside control limits.

FA1125-7MSD for aaa-Trifluorotoluene: Outside control limits.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP45413

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-7MS, FA1125-7MSD were used as the QC samples indicated.

Metals By Method SW846 6010C

Matrix: AQ **Batch ID:** MP24517

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1145-2DUP, FA1145-2MS, FA1145-2MSD, FA1145-2PS, FA1145-2SDL were used as the QC samples for metals.

FA1125-5 for Manganese: Elevated reporting limit(s) due to matrix interference.

FA1125-7 for Manganese: Elevated reporting limit(s) due to matrix interference.

FA1125-9 for Manganese: Elevated reporting limit(s) due to matrix interference.

FA1125-11 for Manganese: Elevated reporting limit(s) due to matrix interference.

Matrix: AQ **Batch ID:** MP24523

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1168-1DUP, FA1168-1MS, FA1168-1MSD, FA1168-1PS, FA1168-1SDL were used as the QC samples for metals.

FA1125-5F for Manganese: Elevated reporting limit(s) due to matrix interference.

FA1125-7F for Manganese: Elevated reporting limit(s) due to matrix interference.

FA1125-9F for Manganese: Elevated reporting limit(s) due to matrix interference.

FA1125-11F for Manganese: Elevated reporting limit(s) due to matrix interference.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP20851

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA986-3MS, FA986-3MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA1125-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA1125-3 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA1125-5 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA1125-7 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA1125-9 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA1125-11 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA1125-13 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP20849

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-7MSD, FA1125-7MS were used as the QC samples for Nitrogen, Ammonia.

Matrix Spike Recovery(s) for Nitrogen, Ammonia are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP20866

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-7MSD, FA1125-7MS were used as the QC samples for Nitrogen, Total Kjeldahl.

Matrix Spike and Matrix Spike Duplicate Recovery(s) for Nitrogen, Total Kjeldahl are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Nitrogen, Total Kjeldahl are outside control limits for sample GP20866-S2. Probable cause due to sample non-homogeneity.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN53831

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-1DUP were used as the QC samples for Iron, Ferrous.

FA1125-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA1125-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA1125-5 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA1125-7 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA1125-9 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA1125-11 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA1125-13 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R29115

FA1125-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R29116

FA1125-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R29117

FA1125-5 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R29118

FA1125-7 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R29119

FA1125-9 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R29120

FA1125-11 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R29122

FA1125-13 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN53849

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1044-2DUP was used as the QC samples for Solids, Total Dissolved.

Matrix: AQ **Batch ID:** GN53890

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1168-5DUP was used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP20846

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1063-4ADUP, FA1063-4AMS were used as the QC samples for BOD, 5 Day.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP20891

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-1MS, FA1125-1MSD were used as the QC samples for Chemical Oxygen Demand.

Matrix: AQ **Batch ID:** GP20893

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-11MSD, FA1125-11MS were used as the QC samples for Chemical Oxygen Demand.

Matrix Spike and Matrix Spike Duplicate Recovery(s) for Chemical Oxygen Demand are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Date: February 7, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA1125
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 01/22/13 thru 01/23/13

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA1125-1	**SS61-MW27**					
Benzene		0.33 J	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		17.4	1.0	0.29	ug/l	SW846 8260B
Chlorobenzene		0.22 J	1.0	0.20	ug/l	SW846 8260B
m-Dichlorobenzene		0.63 J	1.0	0.25	ug/l	SW846 8260B
o-Dichlorobenzene		1.6	1.0	0.22	ug/l	SW846 8260B
p-Dichlorobenzene		0.72 J	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.791	0.20	0.10	mg/l	SW846 8015C
TPH (C10-C22)		0.149 J	0.24	0.095	mg/l	SW846 8015C
Iron		3630	300	29	ug/l	SW846 6010C
Manganese		2230	15	0.70	ug/l	SW846 6010C
Iron, Ferric [a]		1.0	0.50	0.089	mg/l	SM18 3500FED M
Iron, Ferrous [b]		2.6	0.20	0.060	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.092 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		3.3	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5420	500	50	mg/l	SM19 2540C
Sulfate		3260	100	30	mg/l	EPA 300/SW846 9056A
FA1125-1F	**SS61-MW27**					
Manganese		2180	15	0.70	ug/l	SW846 6010C
FA1125-2	**TRIP BLANK**					
No hits reported in this sample.						
FA1125-3	**SS61-MW25**					
Benzene		197	2.5	0.53	ug/l	SW846 8260B
Bromobenzene		0.92 J	2.5	0.55	ug/l	SW846 8260B
sec-Butylbenzene		1.8 J	2.5	0.53	ug/l	SW846 8260B
tert-Butylbenzene		7.1	2.5	0.73	ug/l	SW846 8260B
Chlorobenzene		16.8	2.5	0.50	ug/l	SW846 8260B
1,1-Dichloroethane		2.6	2.5	0.54	ug/l	SW846 8260B
m-Dichlorobenzene		96.2	2.5	0.64	ug/l	SW846 8260B
o-Dichlorobenzene		340	10	2.2	ug/l	SW846 8260B
p-Dichlorobenzene		123	2.5	0.50	ug/l	SW846 8260B
Ethylbenzene		1.6 J	2.5	0.73	ug/l	SW846 8260B
Isopropylbenzene		124	2.5	0.50	ug/l	SW846 8260B
n-Propylbenzene		2.8	2.5	0.57	ug/l	SW846 8260B
Trichloroethylene		4.2	2.5	0.79	ug/l	SW846 8260B
Phenol [c]		3.3 J	19	2.1	ug/l	SW846 8270D
1,2-Dichlorobenzene [c]		169	19	2.6	ug/l	SW846 8270D
1,3-Dichlorobenzene [c]		48.6	19	3.0	ug/l	SW846 8270D

Summary of Hits

Job Number: FA1125
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 01/22/13 thru 01/23/13

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,4-Dichlorobenzene [c]		66.5	19	2.7	ug/l	SW846 8270D
TPH-GRO (C6-C10)		2.47	1.0	0.50	mg/l	SW846 8015C
TPH (C10-C22)		2.05	0.97	0.39	mg/l	SW846 8015C
Iron		1400	300	29	ug/l	SW846 6010C
Manganese		704	15	0.70	ug/l	SW846 6010C
BOD, 5 Day		18.9	8.0	8.0	mg/l	SM19 5210B
Chemical Oxygen Demand		52.2	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		15.9	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [a]		0.86	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.54	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.077 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		3.0	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5420	500	50	mg/l	SM19 2540C
Sulfate		3600	100	30	mg/l	EPA 300/SW846 9056A
FA1125-3F	**SS61-MW25**					
Manganese		684	15	0.70	ug/l	SW846 6010C
FA1125-4	**TRIP BLANK**					
No hits reported in this sample.						
FA1125-5	**SS61-MW28**					
sec-Butylbenzene		1.4	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		6.9	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		1.2	1.0	0.22	ug/l	SW846 8260B
Ethylbenzene		0.37 J	1.0	0.29	ug/l	SW846 8260B
Isopropylbenzene		47.6	1.0	0.20	ug/l	SW846 8260B
n-Propylbenzene		0.65 J	1.0	0.23	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.765	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		5.12	2.4	0.95	mg/l	SW846 8015C
Iron		1050	300	29	ug/l	SW846 6010C
Manganese [d]		1050	30	1.4	ug/l	SW846 6010C
Chemical Oxygen Demand		87.0	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.17 J	0.50	0.089	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.88	0.20	0.060	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.062 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		3.8	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		7640	1000	100	mg/l	SM19 2540C
Sulfate		5740	200	60	mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: FA1125
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 01/22/13 thru 01/23/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA1125-5F	**SS61-MW28**					
Manganese [d]		1020	30	1.4	ug/l	SW846 6010C
FA1125-6	**TRIP BLANK**					
No hits reported in this sample.						
FA1125-7	**SS61-MW29**					
sec-Butylbenzene		0.28 J	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		1.4	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		0.97 J	1.0	0.22	ug/l	SW846 8260B
Isopropylbenzene		9.3	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.244	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		0.334	0.25	0.10	mg/l	SW846 8015C
Iron		626	300	29	ug/l	SW846 6010C
Manganese [d]		1060	60	2.8	ug/l	SW846 6010C
Chemical Oxygen Demand		52.2	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.63	0.40	0.059	mg/l	SM18 3500FED M
Nitrogen, Ammonia		0.037 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		4.0	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		13700	1000	100	mg/l	SM19 2540C
Sulfate		5860	200	60	mg/l	EPA 300/SW846 9056A
FA1125-7F	**SS61-MW29**					
Manganese [d]		1150	60	2.8	ug/l	SW846 6010C
FA1125-8	**TRIP BLANK**					
No hits reported in this sample.						
FA1125-9	**SS61-MW30**					
Chloroform		0.61 J	1.0	0.26	ug/l	SW846 8260B
1,2-Dichloroethane		31.4	1.0	0.22	ug/l	SW846 8260B
Iron		437	300	29	ug/l	SW846 6010C
Manganese [d]		139	60	2.8	ug/l	SW846 6010C
Chemical Oxygen Demand		87.0	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.31 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.13	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		0.74	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		13900	1000	100	mg/l	SM19 2540C
Sulfate		5050	400	120	mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: FA1125
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 01/22/13 thru 01/23/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA1125-9F	**SS61-MW30**					
Manganese [d]		2260	60	2.8	ug/l	SW846 6010C
FA1125-10	**TRIP BLANK**					
No hits reported in this sample.						
FA1125-11	**SS61-MW31**					
Benzene		0.24 J	1.0	0.21	ug/l	SW846 8260B
sec-Butylbenzene		4.3	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		10.1	1.0	0.29	ug/l	SW846 8260B
Carbon disulfide		0.58 J	2.0	0.49	ug/l	SW846 8260B
1,2-Dichloroethane		1.9	1.0	0.22	ug/l	SW846 8260B
Isopropylbenzene		128	2.5	0.50	ug/l	SW846 8260B
n-Propylbenzene		1.5	1.0	0.23	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.864	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		1.89	0.24	0.096	mg/l	SW846 8015C
Iron		94.9 J	300	29	ug/l	SW846 6010C
Manganese [d]		939	60	2.8	ug/l	SW846 6010C
Chemical Oxygen Demand		380	20	5.3	mg/l	SM19 5220C
Iron, Ferrous [b]		0.048 J	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.075 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		0.46 J	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		18200	2000	200	mg/l	SM19 2540C
Sulfate		4980	400	120	mg/l	EPA 300/SW846 9056A
FA1125-11F	**SS61-MW31**					
Manganese [d]		948	60	2.8	ug/l	SW846 6010C
FA1125-12	**TRIP BLANK**					
No hits reported in this sample.						
FA1125-13	**SS61-MW26**					
Benzene		131	2.5	0.53	ug/l	SW846 8260B
sec-Butylbenzene		0.80 J	2.5	0.53	ug/l	SW846 8260B
tert-Butylbenzene		1.7 J	2.5	0.73	ug/l	SW846 8260B
Ethylbenzene		23.2	2.5	0.73	ug/l	SW846 8260B
Isopropylbenzene		83.3	2.5	0.50	ug/l	SW846 8260B
n-Propylbenzene		1.9 J	2.5	0.57	ug/l	SW846 8260B

Summary of Hits

Job Number: FA1125
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 01/22/13 thru 01/23/13

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
1,2,4-Trimethylbenzene	11.3	5.0	0.50	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	1.1 J	5.0	0.50	ug/l	SW846 8260B
Toluene	6.2	2.5	0.50	ug/l	SW846 8260B
m,p-Xylene	39.1	5.0	0.74	ug/l	SW846 8260B
o-Xylene	24.6	2.5	0.50	ug/l	SW846 8260B
2,4-Dimethylphenol	3.8 J	4.8	0.74	ug/l	SW846 8270D
Phenol	2.1 J	4.8	0.53	ug/l	SW846 8270D
TPH-GRO (C6-C10)	0.750	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)	0.334	0.24	0.095	mg/l	SW846 8015C
Iron	57.8 J	300	29	ug/l	SW846 6010C
Manganese	250	15	0.70	ug/l	SW846 6010C
Chemical Oxygen Demand	17.4 J	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide	1.3	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Nitrogen, Total Kjeldahl	2.6	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved	4330	500	50	mg/l	SM19 2540C
Sulfate	2910	100	30	mg/l	EPA 300/SW846 9056A
FA1125-13F SS61-MW26					
Manganese	251	15	0.70	ug/l	SW846 6010C
FA1125-14 TRIP BLANK					

No hits reported in this sample.

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.
(d) Elevated reporting limit(s) due to matrix interference.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C092468.D	1	01/31/13	WV	n/a	n/a	VC3676
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	0.33	1.0	0.21	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	17.4	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	0.22	1.0	0.20	ug/l	J
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.63	1.0	0.25	ug/l	J
95-50-1	o-Dichlorobenzene	1.6	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	0.72	1.0	0.20	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		87-116%
17060-07-0	1,2-Dichloroethane-D4	109%		76-127%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	106%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T006160.D	1	01/28/13	NAF	01/25/13	OP45379	ST303
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	35%		14-62%
4165-62-2	Phenol-d5	22%		10-40%
118-79-6	2,4,6-Tribromophenol	74%		33-118%
4165-60-0	Nitrobenzene-d5	68%		42-108%
321-60-8	2-Fluorobiphenyl	66%		40-106%
1718-51-0	Terphenyl-d14	73%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120350.D	2	01/25/13	CP	n/a	n/a	GCD4905
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.791	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		57-129%
98-08-8	aaa-Trifluorotoluene	109% [a]		58-120%
98-08-8	aaa-Trifluorotoluene	124% [b]		58-120%

(a) Result reported from PID.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35145.D	1	02/04/13	SJL	01/29/13	OP45413	GYY1278
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.149	0.24	0.095	mg/l	J
	TPH (> C22-C36)	ND	0.24	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	3630	300	29	ug/l	1	01/25/13	01/25/13	LM	SW846 6010C [1]	SW846 3010A [3]
Manganese	2230	15	0.70	ug/l	1	01/25/13	01/28/13	LM	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA10487
(2) Instrument QC Batch: MA10492
(3) Prep QC Batch: MP24517

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	8.0 U	8.0	8.0	mg/l	4	01/24/13 09:00	TC	SM19 5210B
Chemical Oxygen Demand	12.4	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	01/25/13 15:50	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	1.0	0.50	0.089	mg/l	1	01/25/13 13:10	LM	SM18 3500FED M
Iron, Ferrous [b]	2.6	0.20	0.060	mg/l	2	01/24/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.092 J	0.10	0.030	mg/l	1	01/25/13 14:25	VK	EPA 350.1
Nitrogen, Nitrate [c]	2.5 U	5.0	2.5	mg/l	50	01/24/13 11:25	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	3.3	0.53	0.17	mg/l	1	01/28/13 15:19	AR	EPA 351.2
Solids, Total Dissolved	5420	500	50	mg/l	5	01/29/13 11:00	MG	SM19 2540C
Sulfate	3260	100	30	mg/l	50	01/24/13 11:25	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA1125-1F	**Date Sampled:**	01/23/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	2180	15	0.70	ug/l	1	01/25/13	01/28/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA10492
(2) Prep QC Batch: MP24523

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-2	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C092469.D	1	01/31/13	WV	n/a	n/a	VC3676
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-2	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-2	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		87-116%
17060-07-0	1,2-Dichloroethane-D4	111%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	103%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B088601.D	2.5	02/01/13	WV	n/a	n/a	VB3631
Run #2	C092470.D	10	01/31/13	WV	n/a	n/a	VC3676

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	63	25	ug/l	
107-02-8	Acrolein [a]	ND	50	17	ug/l	
107-13-1	Acrylonitrile	ND	25	5.0	ug/l	
71-43-2	Benzene	197	2.5	0.53	ug/l	
108-86-1	Bromobenzene	0.92	2.5	0.55	ug/l	J
74-97-5	Bromochloromethane	ND	2.5	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	2.5	0.50	ug/l	
75-25-2	Bromoform	ND	2.5	0.86	ug/l	
104-51-8	n-Butylbenzene	ND	2.5	0.50	ug/l	
135-98-8	sec-Butylbenzene	1.8	2.5	0.53	ug/l	J
98-06-6	tert-Butylbenzene	7.1	2.5	0.73	ug/l	
108-90-7	Chlorobenzene	16.8	2.5	0.50	ug/l	
75-00-3	Chloroethane	ND	5.0	1.3	ug/l	
67-66-3	Chloroform	ND	2.5	0.66	ug/l	
95-49-8	o-Chlorotoluene	ND	2.5	0.53	ug/l	
106-43-4	p-Chlorotoluene	ND	2.5	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	13	3.2	ug/l	
75-15-0	Carbon disulfide	ND	5.0	1.2	ug/l	
56-23-5	Carbon tetrachloride	ND	2.5	0.78	ug/l	
75-34-3	1,1-Dichloroethane	2.6	2.5	0.54	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.5	0.50	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.5	0.62	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.5	0.75	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.5	0.56	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.5	0.66	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.5	0.67	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.5	0.61	ug/l	
124-48-1	Dibromochloromethane	ND	2.5	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.3	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.5	0.59	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	96.2	2.5	0.64	ug/l	
95-50-1	o-Dichlorobenzene	340 [b]	10	2.2	ug/l	
106-46-7	p-Dichlorobenzene	123	2.5	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.5	0.57	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.52	ug/l	
100-41-4	Ethylbenzene	1.6	2.5	0.73	ug/l	J
591-78-6	2-Hexanone	ND	25	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
110-54-3	Hexane	ND	5.0	2.2	ug/l	
98-82-8	Isopropylbenzene	124	2.5	0.50	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.5	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	13	5.6	ug/l	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/l	
74-87-3	Methyl chloride	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	13	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	13	7.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	0.53	ug/l	
91-20-3	Naphthalene	ND	13	2.5	ug/l	
103-65-1	n-Propylbenzene	2.8	2.5	0.57	ug/l	
100-42-5	Styrene	ND	2.5	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.58	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	0.60	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	1.3	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.4	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	1.3	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	2.5	0.80	ug/l	
108-88-3	Toluene	ND	2.5	0.50	ug/l	
79-01-6	Trichloroethylene	4.2	2.5	0.79	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	2.5	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	25	7.9	ug/l	
	m,p-Xylene	ND	5.0	0.74	ug/l	
95-47-6	o-Xylene	ND	2.5	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	111%	87-116%
17060-07-0	1,2-Dichloroethane-D4	102%	110%	76-127%
2037-26-5	Toluene-D8	95%	103%	86-112%
460-00-4	4-Bromofluorobenzene	97%	105%	84-120%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	T006215.D	4	01/30/13	NAF	01/28/13	OP45409	ST305
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	190	38	ug/l	
95-57-8	2-Chlorophenol	ND	19	2.7	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	19	3.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	19	2.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	19	2.9	ug/l	
51-28-5	2,4-Dinitrophenol	ND	96	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	38	5.5	ug/l	
95-48-7	2-Methylphenol	ND	19	2.8	ug/l	
	3&4-Methylphenol	ND	19	5.3	ug/l	
88-75-5	2-Nitrophenol	ND	19	2.6	ug/l	
100-02-7	4-Nitrophenol	ND	96	19	ug/l	
87-86-5	Pentachlorophenol	ND	96	19	ug/l	
108-95-2	Phenol	3.3	19	2.1	ug/l	J
95-95-4	2,4,5-Trichlorophenol	ND	19	3.4	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	19	3.0	ug/l	
83-32-9	Acenaphthene	ND	19	2.7	ug/l	
208-96-8	Acenaphthylene	ND	19	2.7	ug/l	
62-53-3	Aniline	ND	19	3.0	ug/l	
120-12-7	Anthracene	ND	19	2.9	ug/l	
92-87-5	Benzidine	ND	96	19	ug/l	
56-55-3	Benzo(a)anthracene	ND	19	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	19	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	19	2.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	19	2.6	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	19	2.6	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	19	3.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	19	2.7	ug/l	
100-51-6	Benzyl Alcohol	ND	19	3.8	ug/l	
91-58-7	2-Chloronaphthalene	ND	19	2.8	ug/l	
106-47-8	4-Chloroaniline	ND	19	2.6	ug/l	
86-74-8	Carbazole	ND	19	2.0	ug/l	
218-01-9	Chrysene	ND	19	2.2	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	19	2.7	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	19	2.8	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	19	3.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	19	3.3	ug/l	
95-50-1	1,2-Dichlorobenzene	169	19	2.6	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	19	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	48.6	19	3.0	ug/l	
106-46-7	1,4-Dichlorobenzene	66.5	19	2.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	19	2.6	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	19	3.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	19	2.8	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	19	2.2	ug/l	
132-64-9	Dibenzofuran	ND	19	2.9	ug/l	
84-74-2	Di-n-butyl phthalate	ND	19	3.8	ug/l	
117-84-0	Di-n-octyl phthalate	ND	19	3.8	ug/l	
84-66-2	Diethyl phthalate	ND	19	3.8	ug/l	
131-11-3	Dimethyl phthalate	ND	19	3.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	19	4.4	ug/l	
206-44-0	Fluoranthene	ND	19	2.3	ug/l	
86-73-7	Fluorene	ND	19	2.9	ug/l	
118-74-1	Hexachlorobenzene	ND	19	2.6	ug/l	
87-68-3	Hexachlorobutadiene	ND	19	3.7	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	19	3.0	ug/l	
67-72-1	Hexachloroethane	ND	19	2.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	19	2.2	ug/l	
78-59-1	Isophorone	ND	19	2.5	ug/l	
90-12-0	1-Methylnaphthalene	ND	19	2.7	ug/l	
91-57-6	2-Methylnaphthalene	ND	19	2.6	ug/l	
88-74-4	2-Nitroaniline	ND	19	2.9	ug/l	
99-09-2	3-Nitroaniline	ND	19	2.5	ug/l	
100-01-6	4-Nitroaniline	ND	19	3.7	ug/l	
91-20-3	Naphthalene	ND	19	2.4	ug/l	
98-95-3	Nitrobenzene	ND	19	2.8	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	19	2.4	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	19	3.3	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	19	3.8	ug/l	
85-01-8	Phenanthrene	ND	19	2.7	ug/l	
129-00-0	Pyrene	ND	19	2.6	ug/l	
110-86-1	Pyridine	ND	38	7.7	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	19	2.3	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		14-62%
4165-62-2	Phenol-d5	33%		10-40%
118-79-6	2,4,6-Tribromophenol	90%		33-118%
4165-60-0	Nitrobenzene-d5	84%		42-108%
321-60-8	2-Fluorobiphenyl	86%		40-106%
1718-51-0	Terphenyl-d14	89%		39-121%

(a) Dilution required due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120349.D	10	01/25/13	CP	n/a	n/a	GCD4905
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	2.47	1.0	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		57-129%
98-08-8	aaa-Trifluorotoluene	105%		58-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35159.D	4	02/05/13	SJL	01/29/13	OP45413	GYY1279
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.05	0.97	0.39	mg/l	
	TPH (> C22-C36)	ND	0.97	0.39	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	100%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	1400	300	29	ug/l	1	01/25/13	01/25/13	LM	SW846 6010C [1]	SW846 3010A [3]
Manganese	704	15	0.70	ug/l	1	01/25/13	01/28/13	LM	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA10487
(2) Instrument QC Batch: MA10492
(3) Prep QC Batch: MP24517

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	18.9	8.0	8.0	mg/l	4	01/24/13 09:00	TC	SM19 5210B
Chemical Oxygen Demand	52.2	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	15.9	1.0	0.50	mg/l	1	01/25/13 15:50	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.86	0.40	0.059	mg/l	1	01/25/13 13:14	LM	SM18 3500FED M
Iron, Ferrous [b]	0.54	0.10	0.030	mg/l	1	01/24/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.077 J	0.10	0.030	mg/l	1	01/25/13 14:26	VK	EPA 350.1
Nitrogen, Nitrate [c]	2.5 U	5.0	2.5	mg/l	50	01/24/13 11:41	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	3.0	0.53	0.17	mg/l	1	01/28/13 15:20	AR	EPA 351.2
Solids, Total Dissolved	5420	500	50	mg/l	5	01/29/13 11:00	MG	SM19 2540C
Sulfate	3600	100	30	mg/l	50	01/24/13 11:41	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA1125-3F	**Date Sampled:**	01/23/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	684	15	0.70	ug/l	1	01/25/13	01/28/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA10492
(2) Prep QC Batch: MP24523

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-4	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C092471.D	1	01/31/13	WV	n/a	n/a	VC3676
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-4	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-4	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		87-116%
17060-07-0	1,2-Dichloroethane-D4	113%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	104%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C092472.D	1	01/31/13	WV	n/a	n/a	VC3676
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	1.4	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	6.9	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	1.2	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	0.37	1.0	0.29	ug/l	J
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	47.6	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.65	1.0	0.23	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		87-116%
17060-07-0	1,2-Dichloroethane-D4	112%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	103%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	U036050.D	4	01/31/13	NAF	01/28/13	OP45409	SU1702
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	200	39	ug/l	
95-57-8	2-Chlorophenol	ND	20	2.8	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	20	3.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	20	2.8	ug/l	
105-67-9	2,4-Dimethylphenol	ND	20	3.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	98	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	39	5.6	ug/l	
95-48-7	2-Methylphenol	ND	20	2.8	ug/l	
	3&4-Methylphenol	ND	20	5.4	ug/l	
88-75-5	2-Nitrophenol	ND	20	2.7	ug/l	
100-02-7	4-Nitrophenol	ND	98	20	ug/l	
87-86-5	Pentachlorophenol	ND	98	20	ug/l	
108-95-2	Phenol	ND	20	2.2	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	20	3.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	20	3.1	ug/l	
83-32-9	Acenaphthene	ND	20	2.7	ug/l	
208-96-8	Acenaphthylene	ND	20	2.7	ug/l	
62-53-3	Aniline	ND	20	3.1	ug/l	
120-12-7	Anthracene	ND	20	2.9	ug/l	
92-87-5	Benzidine	ND	98	20	ug/l	
56-55-3	Benzo(a)anthracene	ND	20	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	20	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	20	3.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	20	2.6	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	20	2.6	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	20	3.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	20	2.8	ug/l	
100-51-6	Benzyl Alcohol	ND	20	3.9	ug/l	
91-58-7	2-Chloronaphthalene	ND	20	2.9	ug/l	
106-47-8	4-Chloroaniline	ND	20	2.7	ug/l	
86-74-8	Carbazole	ND	20	2.1	ug/l	
218-01-9	Chrysene	ND	20	2.3	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	20	2.7	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	20	2.8	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	20	3.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	20	3.4	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	2.7	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	20	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	3.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	2.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	2.7	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	20	3.2	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	20	2.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	20	2.3	ug/l	
132-64-9	Dibenzofuran	ND	20	2.9	ug/l	
84-74-2	Di-n-butyl phthalate	ND	20	3.9	ug/l	
117-84-0	Di-n-octyl phthalate	ND	20	3.9	ug/l	
84-66-2	Diethyl phthalate	ND	20	3.9	ug/l	
131-11-3	Dimethyl phthalate	ND	20	3.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20	4.5	ug/l	
206-44-0	Fluoranthene	ND	20	2.3	ug/l	
86-73-7	Fluorene	ND	20	3.0	ug/l	
118-74-1	Hexachlorobenzene	ND	20	2.7	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	3.7	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	3.1	ug/l	
67-72-1	Hexachloroethane	ND	20	2.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20	2.2	ug/l	
78-59-1	Isophorone	ND	20	2.5	ug/l	
90-12-0	1-Methylnaphthalene	ND	20	2.8	ug/l	
91-57-6	2-Methylnaphthalene	ND	20	2.7	ug/l	
88-74-4	2-Nitroaniline	ND	20	2.9	ug/l	
99-09-2	3-Nitroaniline	ND	20	2.5	ug/l	
100-01-6	4-Nitroaniline	ND	20	3.8	ug/l	
91-20-3	Naphthalene	ND	20	2.5	ug/l	
98-95-3	Nitrobenzene	ND	20	2.8	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	20	2.5	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	20	3.3	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	20	3.9	ug/l	
85-01-8	Phenanthrene	ND	20	2.8	ug/l	
129-00-0	Pyrene	ND	20	2.7	ug/l	
110-86-1	Pyridine	ND	39	7.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.4	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	63%		14-62%
4165-62-2	Phenol-d5	59%		10-40%
118-79-6	2,4,6-Tribromophenol	98%		33-118%
4165-60-0	Nitrobenzene-d5	82%		42-108%
321-60-8	2-Fluorobiphenyl	100%		40-106%
1718-51-0	Terphenyl-d14	97%		39-121%

(a) Dilution required due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120340.D	1	01/25/13	CP	n/a	n/a	GCD4905
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.765	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	117%		57-129%
98-08-8	aaa-Trifluorotoluene	108% [a]		58-120%
98-08-8	aaa-Trifluorotoluene	126% [b]		58-120%

(a) Result reported from PID.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35160.D	10	02/05/13	SJL	01/29/13	OP45413	GYY1279
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	5.12	2.4	0.95	mg/l	
	TPH (> C22-C36)	ND	2.4	0.95	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	1050	300	29	ug/l	1	01/25/13	01/25/13	LM	SW846 6010C [1]	SW846 3010A [3]
Manganese [a]	1050	30	1.4	ug/l	2	01/25/13	01/28/13	LM	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA10487
(2) Instrument QC Batch: MA10492
(3) Prep QC Batch: MP24517

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	13 U	13	13	mg/l	7	01/24/13 09:00	TC	SM19 5210B
Chemical Oxygen Demand	87.0	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	01/25/13 15:50	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.17 J	0.50	0.089	mg/l	1	01/25/13 13:19	LM	SM18 3500FED M
Iron, Ferrous [b]	0.88	0.20	0.060	mg/l	2	01/24/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.062 J	0.10	0.030	mg/l	1	01/25/13 14:27	VK	EPA 350.1
Nitrogen, Nitrate [c]	5.0 U	10	5.0	mg/l	100	01/24/13 11:56	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	3.8	0.53	0.17	mg/l	1	01/28/13 15:21	AR	EPA 351.2
Solids, Total Dissolved	7640	1000	100	mg/l	10	01/29/13 11:00	MG	SM19 2540C
Sulfate	5740	200	60	mg/l	100	01/24/13 11:56	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA1125-5F	**Date Sampled:**	01/23/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese [a]	1020	30	1.4	ug/l	2	01/25/13	01/29/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA10496
(2) Prep QC Batch: MP24523

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-6	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C092473.D	1	01/31/13	WV	n/a	n/a	VC3676
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-6	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-6	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		87-116%
17060-07-0	1,2-Dichloroethane-D4	110%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	105%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C092474.D	1	01/31/13	WV	n/a	n/a	VC3676
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.28	1.0	0.21	ug/l	J
98-06-6	tert-Butylbenzene	1.4	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.97	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	9.3	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		87-116%
17060-07-0	1,2-Dichloroethane-D4	114%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	105%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T006161.D	1	01/28/13	NAF	01/25/13	OP45379	ST303
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	32%		14-62%
4165-62-2	Phenol-d5	23%		10-40%
118-79-6	2,4,6-Tribromophenol	74%		33-118%
4165-60-0	Nitrobenzene-d5	58%		42-108%
321-60-8	2-Fluorobiphenyl	59%		40-106%
1718-51-0	Terphenyl-d14	69%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120371.D	1	01/28/13	CP	n/a	n/a	GCD4907
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.244	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		57-129%
98-08-8	aaa-Trifluorotoluene	106%		58-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35140.D	1	02/04/13	SJL	01/29/13	OP45413	GYY1278
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.334	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	626	300	29	ug/l	1	01/25/13	01/25/13	LM	SW846 6010C [1]	SW846 3010A [3]
Manganese [a]	1060	60	2.8	ug/l	4	01/25/13	01/28/13	LM	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA10487
(2) Instrument QC Batch: MA10492
(3) Prep QC Batch: MP24517

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	4.0 U	4.0	4.0	mg/l	2	01/24/13 09:00	TC	SM19 5210B
Chemical Oxygen Demand	52.2	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	01/25/13 15:50	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.63	0.40	0.059	mg/l	1	01/25/13 13:24	LM	SM18 3500FED M
Iron, Ferrous [b]	0.030 U	0.10	0.030	mg/l	1	01/24/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.037 J	0.10	0.030	mg/l	1	01/25/13 14:15	VK	EPA 350.1
Nitrogen, Nitrate [c]	5.0 U	10	5.0	mg/l	100	01/24/13 12:12	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	4.0	0.53	0.17	mg/l	1	01/28/13 15:18	AR	EPA 351.2
Solids, Total Dissolved	13700	1000	100	mg/l	10	01/25/13	MG	SM19 2540C
Sulfate	5860	200	60	mg/l	100	01/24/13 12:12	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA1125-7F	**Date Sampled:**	01/22/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese [a]	1150	60	2.8	ug/l	4	01/25/13	01/29/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA10496
(2) Prep QC Batch: MP24523

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-8	**Date Sampled:**	01/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C092475.D	1	01/31/13	WV	n/a	n/a	VC3676
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-8	**Date Sampled:**	01/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-8	**Date Sampled:**	01/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		87-116%
17060-07-0	1,2-Dichloroethane-D4	114%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	105%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C092476.D	1	01/31/13	WV	n/a	n/a	VC3676
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	0.61	1.0	0.26	ug/l	J
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	31.4	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		87-116%
17060-07-0	1,2-Dichloroethane-D4	118%		76-127%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	104%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T006162.D	1	01/28/13	NAF	01/25/13	OP45379	ST303
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		14-62%
4165-62-2	Phenol-d5	28%		10-40%
118-79-6	2,4,6-Tribromophenol	73%		33-118%
4165-60-0	Nitrobenzene-d5	69%		42-108%
321-60-8	2-Fluorobiphenyl	70%		40-106%
1718-51-0	Terphenyl-d14	64%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120346.D	1	01/25/13	CP	n/a	n/a	GCD4905
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		57-129%
98-08-8	aaa-Trifluorotoluene	94%		58-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35143.D	1	02/04/13	SJL	01/29/13	OP45413	GYY1278
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.24	0.095	mg/l	
	TPH (> C22-C36)	ND	0.24	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	437	300	29	ug/l	1	01/25/13	01/25/13	LM	SW846 6010C [1]	SW846 3010A [3]
Manganese [a]	139	60	2.8	ug/l	4	01/25/13	01/28/13	LM	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA10487
(2) Instrument QC Batch: MA10492
(3) Prep QC Batch: MP24517

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	4.0 U	4.0	4.0	mg/l	2	01/24/13 09:00	TC	SM19 5210B
Chemical Oxygen Demand	87.0	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	01/25/13 15:50	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.31 J	0.40	0.059	mg/l	1	01/25/13 13:29	LM	SM18 3500FED M
Iron, Ferrous [b]	0.13	0.10	0.030	mg/l	1	01/24/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	01/25/13 14:28	VK	EPA 350.1
Nitrogen, Nitrate [c]	10 U	20	10	mg/l	200	01/24/13 12:28	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	0.74	0.53	0.17	mg/l	1	01/28/13 15:22	AR	EPA 351.2
Solids, Total Dissolved	13900	1000	100	mg/l	10	01/25/13	MG	SM19 2540C
Sulfate	5050	400	120	mg/l	200	01/24/13 12:28	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA1125-9F	**Date Sampled:**	01/22/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese [a]	2260	60	2.8	ug/l	4	01/25/13	01/29/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA10496
(2) Prep QC Batch: MP24523

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-10	**Date Sampled:**	01/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C092479.D	1	01/31/13	WV	n/a	n/a	VC3676
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-10	**Date Sampled:**	01/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-10	**Date Sampled:**	01/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		87-116%
17060-07-0	1,2-Dichloroethane-D4	110%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	103%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13619.D	1	02/01/13	EG	n/a	n/a	VP529
Run #2	P13654.D	2.5	02/04/13	EG	n/a	n/a	VP530

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	0.24	1.0	0.21	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	4.3	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	10.1	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	0.58	2.0	0.49	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	1.9	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	128 [b]	2.5	0.50	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	1.5	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	100%	87-116%
17060-07-0	1,2-Dichloroethane-D4	98%	104%	76-127%
2037-26-5	Toluene-D8	98%	100%	86-112%
460-00-4	4-Bromofluorobenzene	98%	102%	84-120%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T006163.D	1	01/28/13	NAF	01/25/13	OP45379	ST303
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		14-62%
4165-62-2	Phenol-d5	29%		10-40%
118-79-6	2,4,6-Tribromophenol	74%		33-118%
4165-60-0	Nitrobenzene-d5	68%		42-108%
321-60-8	2-Fluorobiphenyl	74%		40-106%
1718-51-0	Terphenyl-d14	73%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120347.D	1	01/25/13	CP	n/a	n/a	GCD4905
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.864	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	127%		57-129%
98-08-8	aaa-Trifluorotoluene	105%		58-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35144.D	1	02/04/13	SJL	01/29/13	OP45413	GYY1278
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	1.89	0.24	0.096	mg/l	
	TPH (> C22-C36)	ND	0.24	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	104%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	94.9 J	300	29	ug/l	1	01/25/13	01/25/13	LM	SW846 6010C [1]	SW846 3010A [3]
Manganese [a]	939	60	2.8	ug/l	4	01/25/13	01/28/13	LM	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA10487
(2) Instrument QC Batch: MA10492
(3) Prep QC Batch: MP24517

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11	**Date Sampled:**	01/22/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	4.0 U	4.0	4.0	mg/l	2	01/24/13 09:00	TC	SM19 5210B
Chemical Oxygen Demand	380	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	01/25/13 15:50	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.059 U	0.40	0.059	mg/l	1	01/25/13 13:34	LM	SM18 3500FED M
Iron, Ferrous [b]	0.048 J	0.10	0.030	mg/l	1	01/24/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.075 J	0.10	0.030	mg/l	1	01/25/13 14:30	VK	EPA 350.1
Nitrogen, Nitrate [c]	10 U	20	10	mg/l	200	01/24/13 12:44	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	0.46 J	0.53	0.17	mg/l	1	01/28/13 15:23	AR	EPA 351.2
Solids, Total Dissolved	18200	2000	200	mg/l	20	01/25/13	MG	SM19 2540C
Sulfate	4980	400	120	mg/l	200	01/24/13 12:44	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA1125-11F	**Date Sampled:**	01/22/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese [a]	948	60	2.8	ug/l	4	01/25/13	01/29/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA10496
(2) Prep QC Batch: MP24523

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-12	**Date Sampled:**	01/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13584.D	1	01/31/13	EG	n/a	n/a	VP528
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-12	**Date Sampled:**	01/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone [a]	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-12	**Date Sampled:**	01/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	105%		76-127%
2037-26-5	Toluene-D8	99%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13604.D	2.5	01/31/13	EG	n/a	n/a	VP528
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	63	25	ug/l	
107-02-8	Acrolein	ND	50	17	ug/l	
107-13-1	Acrylonitrile	ND	25	5.0	ug/l	
71-43-2	Benzene	131	2.5	0.53	ug/l	
108-86-1	Bromobenzene	ND	2.5	0.55	ug/l	
74-97-5	Bromochloromethane	ND	2.5	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	2.5	0.50	ug/l	
75-25-2	Bromoform	ND	2.5	0.86	ug/l	
104-51-8	n-Butylbenzene	ND	2.5	0.50	ug/l	
135-98-8	sec-Butylbenzene	0.80	2.5	0.53	ug/l	J
98-06-6	tert-Butylbenzene	1.7	2.5	0.73	ug/l	J
108-90-7	Chlorobenzene	ND	2.5	0.50	ug/l	
75-00-3	Chloroethane	ND	5.0	1.3	ug/l	
67-66-3	Chloroform	ND	2.5	0.66	ug/l	
95-49-8	o-Chlorotoluene	ND	2.5	0.53	ug/l	
106-43-4	p-Chlorotoluene	ND	2.5	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	13	3.2	ug/l	
75-15-0	Carbon disulfide	ND	5.0	1.2	ug/l	
56-23-5	Carbon tetrachloride	ND	2.5	0.78	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.5	0.54	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.5	0.50	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.5	0.62	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.5	0.75	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.5	0.56	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.5	0.66	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.5	0.67	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.5	0.61	ug/l	
124-48-1	Dibromochloromethane	ND	2.5	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.3	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.5	0.59	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	2.5	0.64	ug/l	
95-50-1	o-Dichlorobenzene	ND	2.5	0.54	ug/l	
106-46-7	p-Dichlorobenzene	ND	2.5	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.5	0.57	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.52	ug/l	
100-41-4	Ethylbenzene	23.2	2.5	0.73	ug/l	
591-78-6	2-Hexanone [a]	ND	25	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
110-54-3	Hexane	ND	5.0	2.2	ug/l	
98-82-8	Isopropylbenzene	83.3	2.5	0.50	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.5	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	13	5.6	ug/l	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/l	
74-87-3	Methyl chloride	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	13	5.0	ug/l	
78-93-3	Methyl ethyl ketone [a]	ND	13	7.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	0.53	ug/l	
91-20-3	Naphthalene	ND	13	2.5	ug/l	
103-65-1	n-Propylbenzene	1.9	2.5	0.57	ug/l	J
100-42-5	Styrene	ND	2.5	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.58	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	0.60	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	1.3	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.4	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	1.3	ug/l	
95-63-6	1,2,4-Trimethylbenzene	11.3	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.1	5.0	0.50	ug/l	J
127-18-4	Tetrachloroethylene	ND	2.5	0.80	ug/l	
108-88-3	Toluene	6.2	2.5	0.50	ug/l	
79-01-6	Trichloroethylene	ND	2.5	0.79	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	2.5	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	25	7.9	ug/l	
	m,p-Xylene	39.1	5.0	0.74	ug/l	
95-47-6	o-Xylene	24.6	2.5	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	109%		76-127%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T006217.D	1	01/30/13	NAF	01/28/13	OP45409	ST305
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	3.8	4.8	0.74	ug/l	J
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	2.1	4.8	0.53	ug/l	J
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		14-62%
4165-62-2	Phenol-d5	27%		10-40%
118-79-6	2,4,6-Tribromophenol	78%		33-118%
4165-60-0	Nitrobenzene-d5	67%		42-108%
321-60-8	2-Fluorobiphenyl	68%		40-106%
1718-51-0	Terphenyl-d14	78%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120381.D	1	01/28/13	CP	n/a	n/a	GCD4907
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.750	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	111%		57-129%
98-08-8	aaa-Trifluorotoluene	97%		58-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35161.D	1	02/05/13	SJL	01/29/13	OP45413	GYY1279
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.334	0.24	0.095	mg/l	
	TPH (> C22-C36)	ND	0.24	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	57.8 J	300	29	ug/l	1	01/25/13	01/28/13	LM	SW846 6010C [1]	SW846 3010A [2]
Manganese	250	15	0.70	ug/l	1	01/25/13	01/28/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA10492
(2) Prep QC Batch: MP24523

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	4.0 U	4.0	4.0	mg/l	2	01/24/13 09:00	TC	SM19 5210B
Chemical Oxygen Demand	17.4 J	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	1.3	1.0	0.50	mg/l	1	01/25/13 15:50	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.059 U	0.40	0.059	mg/l	1	01/28/13 11:56	LM	SM18 3500FED M
Iron, Ferrous [b]	0.030 U	0.10	0.030	mg/l	1	01/24/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	01/25/13 14:31	VK	EPA 350.1
Nitrogen, Nitrate [c]	1.3 U	2.5	1.3	mg/l	25	01/24/13 13:32	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	2.6	0.53	0.17	mg/l	1	01/28/13 16:04	AR	EPA 351.2
Solids, Total Dissolved	4330	500	50	mg/l	5	01/29/13 11:00	MG	SM19 2540C
Sulfate	2910	100	30	mg/l	50	01/24/13 17:18	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA1125-13F	**Date Sampled:**	01/23/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	251	15	0.70	ug/l	1	01/25/13	01/28/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA10492
(2) Prep QC Batch: MP24523

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-14	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13585.D	1	01/31/13	EG	n/a	n/a	VP528
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-14	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone [a]	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1125-14	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		87-116%
17060-07-0	1,2-Dichloroethane-D4	104%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA1125

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 1-23-2013-1
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of coolers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1	SS61-MW27	01/23/2013	0930	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				1
2	Trip Blank	1-23-2013		-	TB	1	AQ	1	X													1
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	1-23-2013	1600	1. FX		09:30
2. FX			2. [illegible] (ALL)	1-24-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest
Lab Recipient:
Shipped No.:
Airbill Number: 7945 8300 8265
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

2.4 2.8 3.0 2.6 2.8 3.0 3.0

FA1125: Chain of Custody
Page 1 of 8

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

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Fax: 205-918-4050

FA1125

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 1-23-2013-2
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
3	SS61-MW25	01/23/2013	1140	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				2
4	Trip Blank	1/23/2013		-	TB	1	AQ	1	X													2
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	1-23-2013	1600	1. FX		09:30
2. FX			2. J Cooper (Alze)	1-24-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7945-8300-8633
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA1125: Chain of Custody
Page 2 of 8

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FA 1125

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 1-23-2013-3
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
5	SS61-MW28	01/23/2013	1000	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				3
6	Trip Blank	1-23-2013	-	-	TB	1	AQ	1	X													3
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	1-23-2013	1600	1. FX		09130
2. FX			2. J Cobar (A284)	1-24-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7945-8300 8302
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA1125: Chain of Custody
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FA 1125

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 1-23-2013-4
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
7	SS61-MW29	01/22/2013	1600	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				
8	Trip Blank	1-22-2013		-	TB	1	AQ	1	X													4
				-																		4
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	1-23-2013	1600	1. FX		0930
2. FX			2. J. Capone (ALS)	1-24-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest
Lab Recipient:
Shipped No.:
Airbill Number: 7945-8300 8747
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

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FA1125

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 1-23-2013-5
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
9	SS61-MW30	01/22/2013	1430	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				5
10	Trip Blank	1-22-2013	/	-	TB	1	AQ	1	X													5
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	1-23-2013	1600	1. FX		09:30
2. FX			2. J. Cooper (ALSE)	1-24-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest
Lab Recipient:
Shipped No.:
Airbill Number: 7945 8300 8379
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

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FA1125

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 1-23-2013-6
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
11	SS61-MW31	01/22/2013	1410	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				6
12	Trip Blank	1-22-2013		-	TB	1	Aq	1	X													6
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	1-23-2013	1600	1. FX		09:30
2. FX			2. J. Cooper (ALPS)	1-24-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7945 8300 8655
Analytical Lab: Accutest Delivery Location: Orlando, FL
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 (-s) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

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FA 1125

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 1-23-2013-7
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
13	SS61-MW26	01/23/2013	1215	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				7
14	Trip Blank	1-23-2013		-	TB	1	Aq	1	X													7
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	1-23-2013	1600	1. FX		0930
2. FX			2. J. Cooper (ALSK)	1-24-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest
Lab Recipient:
Shipped No.:
Airbill Number: 7945-8315-0570
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA1125: Chain of Custody
Page 7 of 8

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 1125 CLIENT: BHATE PROJECT: SS-61

DATE/TIME RECEIVED: 1-24-13 09:30 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: 7

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7945 8315 0570

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [X] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [X] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [X] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? 7

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.0 2.4 2.6 2.2 2.4 2.6 2.6
- [ ] CORRECTED TEMPS: 2.4 2.8 3.0 2.6 2.8 3.0 3.0

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [X] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [X] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS: FOR SAMPLE # 1 RECEIVED 1 ~~(E/Pro)~~ (DRO) AMBER BROKEN

TECHNICIAN SIGNATURE/DATE JC 1-24-13 REVIEWER SIGNATURE/DATE [signature] 01/24/13

NF 12/10

receipt confirmation 122910.xls

5.1 5

FA1125: Chain of Custody

Page 8 of 8

Southeast ACCUTEST LABORATORIES

02/08/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA1176

Sampling Dates: 01/23/13 - 01/24/13

Report to:

Bhate Environmental Associates, Inc.

zbeck@bhate.com

ATTN: Zack Beck

Total number of pages in report: 75

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), AK, AR, GA, KY, MA, NV, OK, UT, VA, WA, WI

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Accutest LabLink@19:59 08-Feb-2013

Sample Summary

Bhate Environmental

Job No: FA1176

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA1176-1	01/23/13	14:50	TL	01/25/13	AQ	Ground Water	SS61-MW24
FA1176-1F	01/23/13	14:50	TL	01/25/13	AQ	Groundwater Filtered	SS61-MW24
FA1176-2	01/23/13	00:00	TL	01/25/13	AQ	Trip Blank Water	TRIP BLANK
FA1176-3	01/23/13	15:30	TL	01/25/13	AQ	Ground Water	SS61-MW23
FA1176-3F	01/23/13	15:30	TL	01/25/13	AQ	Groundwater Filtered	SS61-MW23
FA1176-4	01/23/13	00:00	TL	01/25/13	AQ	Trip Blank Water	TRIP BLANK
FA1176-5	01/24/13	09:20	TL	01/25/13	AQ	Ground Water	SS61-MW21
FA1176-5F	01/24/13	09:20	TL	01/25/13	AQ	Groundwater Filtered	SS61-MW21
FA1176-6	01/24/13	00:00	TL	01/25/13	AQ	Trip Blank Water	TRIP BLANK
FA1176-7	01/24/13	09:20	TL	01/25/13	AQ	Ground Water	SS61-MW21-A
FA1176-7F	01/24/13	09:20	TL	01/25/13	AQ	Groundwater Filtered	SS61-MW21-A
FA1176-8	01/24/13	00:00	TL	01/25/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA1176

Site: Holloman AFB; SS61 VCM **Report Date** 2/8/2013 7:51:02 PM

4 Samples and 4 Trip Blanks were collected between 01/23/2013 and 01/24/2013 and were received at Accutest on 01/25/2013 properly preserved, at 2 Deg. C and intact. These Samples received an Accutest job number of FA1176. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VP528

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1176-5MS, FA1176-5MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for 2-Hexanone, Acetone, Methyl ethyl ketone are outside control limits. Blank Spike recoveries are biased high. Analytes are non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, Benzene, cis-1,3-Dichloropropene, Isopropylbenzene are outside control limits. Probable cause due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethylene, 2-Chloroethyl vinyl ether, Benzene, cis-1,3-Dichloropropene, Isopropylbenzene, trans-1,3-Dichloropropene are outside control limits. Probable cause due to matrix interference.

RPD(s) for MSD for 2-Chloroethyl vinyl ether, Carbon disulfide, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene are outside control limits for sample FA1176-5MSD. Probable cause due to sample non-homogeneity.

FA1176-1 for 2-Hexanone: Associated BS recovery outside control limits.

FA1176-1 for Acetone: Associated BS recovery outside control limits.

FA1176-1 for Methyl ethyl ketone: Associated BS recovery outside control limits.

FA1176-2 for 2-Hexanone: Associated BS recovery outside control limits.

FA1176-2 for Acetone: Associated BS recovery outside control limits.

FA1176-2 for Methyl ethyl ketone: Associated BS recovery outside control limits.

FA1176-3 for 2-Hexanone: Associated BS recovery outside control limits.

FA1176-3 for Acetone: Associated BS recovery outside control limits.

FA1176-3 for Methyl ethyl ketone: Associated BS recovery outside control limits.

FA1176-4 for 2-Hexanone: Associated BS recovery outside control limits.

FA1176-4 for Acetone: Associated BS recovery outside control limits.

FA1176-4 for Methyl ethyl ketone: Associated BS recovery outside control limits.

FA1176-5 for 2-Hexanone: Associated BS recovery outside control limits.

FA1176-5 for Acetone: Associated BS recovery outside control limits.

FA1176-5 for Methyl ethyl ketone: Associated BS recovery outside control limits.

FA1176-6 for 2-Hexanone: Associated BS recovery outside control limits.

FA1176-6 for Acetone: Associated BS recovery outside control limits.

FA1176-6 for Methyl ethyl ketone: Associated BS recovery outside control limits.

FA1176-8 for 2-Hexanone: Associated BS recovery outside control limits.

FA1176-8 for Acetone: Associated BS recovery outside control limits.

FA1176-8 for Methyl ethyl ketone: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VP532

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1423-6MS, FA1423-6MSD were used as the QC samples indicated.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VP532

Blank Spike Recovery(s) for Acetone are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Probable cause due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene are outside control limits. Probable cause due to matrix interference.

RPD(s) for MSD for 2-Chloroethyl vinyl ether, Acrolein, Bromodichloromethane, Bromoform, Carbon disulfide, Carbon tetrachloride, cis-1,3-Dichloropropene, Hexane, trans-1,3-Dichloropropene are outside control limits for sample FA1423-6MSD. Probable cause due to sample non-homogeneity.

FA1176-7: Results from different vials are not consistent; higher results were reported.

FA1176-7 for Acetone: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VP533

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1509-3MS, FA1509-3MSD were used as the QC samples indicated.

FA1176-7: Sample vial(s) contained significant headspace; reported results are considered minimum values.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP45409

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1223-6MS were used as the QC samples indicated.

OP45409-MS: MSD not available due to loss during sample extraction.

Matrix Spike Recovery(s) for Pyridine are outside control limits. Probable cause due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Sample(s) FA1176-3, OP45409-MS have surrogates outside control limits. Probable cause due to matrix interference.

Matrix: AQ **Batch ID:** OP45439

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1176-7MS, FA1176-7MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Aniline, Benzidine are outside control limits. Blank Spike recoveries are biased high. Analytes are non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 4-Nitrophenol, Aniline, Benzo(b)fluoranthene, Benzoic Acid, Hexachlorocyclopentadiene, N-Nitrosodimethylamine, Phenol, Pyridine are outside control limits. Probable cause due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 4-Nitrophenol, Aniline, Benzoic Acid, N-Nitrosodimethylamine, Phenol are outside control limits. Probable cause due to matrix interference.

Sample(s) OP45439-MS, OP45439-MSD, FA1176-7 have surrogates outside control limits. Probable cause due to matrix interference.

FA1176-7 for Phenol-d5: Outside control limits due to matrix interference. Confirmed by MS/MSD.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD4907

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-7MS, FA1125-7MSD were used as the QC samples indicated.

Sample(s) FA1125-7MS, FA1125-7MSD have surrogates outside control limits. Probable cause due to matrix interference.

FA1125-7MS for aaa-Trifluorotoluene: Outside control limits.

FA1125-7MSD for aaa-Trifluorotoluene: Outside control limits.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD4911

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1257-2MS, FA1257-2MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** GCD4914

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1258-1MS, FA1258-1MSD were used as the QC samples indicated.

Sample(s) FA1258-1MS, FA1258-1MSD have surrogates outside control limits. Probable cause due to matrix interference.

FA1258-1MS for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

FA1258-1MS for aaa-Trifluorotoluene: Result reported from PID.

FA1258-1MSD for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

FA1258-1MSD for aaa-Trifluorotoluene: Result reported from PID.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP45413

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-7MS, FA1125-7MSD were used as the QC samples indicated.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP24535

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1176-1DUP, FA1176-1MS, FA1176-1MSD, FA1176-1PS, FA1176-1SDL were used as the QC samples for metals.

RPD(s) for Duplicate for Iron are outside control limits for sample MP24535-D1. RPD acceptable due to low duplicate and sample concentrations.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP20863

All samples were prepared within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1157-2MS, FA1157-2MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA1176-1 for Nitrogen, Nitrate: Sample received near end of hold time, analyzed as soon as possible. Dilution required due to matrix interference.

FA1176-3 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA1176-5 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA1176-7 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP20880

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1158-3MS, FA1158-3MSD were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP20892

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1176-7MS, FA1176-7MSD were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP20868

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1176-1MS, FA1176-1MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Matrix Spike and Matrix Spike Duplicate Recovery(s) for Nitrogen, Total Kjeldahl are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN53854

All method blanks for this batch meet method specific criteria.

Sample(s) FA1176-1DUP was used as the QC samples for Iron, Ferrous.

FA1176-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA1176-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA1176-5 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA1176-7 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R29123

FA1176-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R29124

FA1176-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R29125

FA1176-5 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R29126

FA1176-7 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN53911

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1201-2DUP was used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP20853

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1176-3MS, FA1176-3DUP were used as the QC samples for BOD, 5 Day.

Blank Spike Recovery(s) for BOD, 5 Day are outside control limits. Spike check's running bias high. Sample recoveries may be biased high.

RPD(s) for Duplicate for BOD, 5 Day are outside control limits for sample GP20853-D1. RPD acceptable due to low duplicate and sample concentrations.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP20891

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA1125-1MS, FA1125-1MSD were used as the QC samples for Chemical Oxygen Demand.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Date: February 8, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA1176
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 01/23/13 thru 01/24/13

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Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA1176-1	**SS61-MW24**					
Benzene		61.0	5.0	1.1	ug/l	SW846 8260B
sec-Butylbenzene		7.0	5.0	1.1	ug/l	SW846 8260B
tert-Butylbenzene		7.5	5.0	1.5	ug/l	SW846 8260B
o-Dichlorobenzene		1.6 J	5.0	1.1	ug/l	SW846 8260B
Ethylbenzene		519	25	7.3	ug/l	SW846 8260B
Isopropylbenzene		1030	25	5.0	ug/l	SW846 8260B
p-Isopropyltoluene		1.2 J	5.0	1.0	ug/l	SW846 8260B
n-Propylbenzene		46.3	5.0	1.1	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		174	10	1.0	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		14.1	10	1.0	ug/l	SW846 8260B
Toluene		28.3	5.0	1.0	ug/l	SW846 8260B
m,p-Xylene		446	10	1.5	ug/l	SW846 8260B
o-Xylene		145	5.0	1.0	ug/l	SW846 8260B
2,4-Dimethylphenol		17.9	4.8	0.74	ug/l	SW846 8270D
2-Methylphenol		0.73 J	4.8	0.69	ug/l	SW846 8270D
Phenol		0.86 J	4.8	0.53	ug/l	SW846 8270D
1,2-Dichlorobenzene		1.5 J	4.8	0.65	ug/l	SW846 8270D
Naphthalene		1.8 J	4.8	0.61	ug/l	SW846 8270D
TPH-GRO (C6-C10)		7.07	1.0	0.50	mg/l	SW846 8015C
TPH (C10-C22)		1.40	0.24	0.095	mg/l	SW846 8015C
Iron		904	300	29	ug/l	EPA 200.7
Manganese		400	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		57.1	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.67	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.23	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.061 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		0.99	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5130	500	50	mg/l	SM19 2540C
Sulfate		3630	100	30	mg/l	EPA 300/SW846 9056A
FA1176-1F	**SS61-MW24**					
Manganese		392	15	0.70	ug/l	EPA 200.7
FA1176-2	**TRIP BLANK**					
Methylene chloride		7.1	5.0	2.0	ug/l	SW846 8260B
FA1176-3	**SS61-MW23**					
tert-Butylbenzene		0.68 J	1.0	0.29	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.0709 J	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		0.187 J	0.24	0.097	mg/l	SW846 8015C

Summary of Hits

Job Number: FA1176
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 01/23/13 thru 01/24/13

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Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Iron		144 J	300	29	ug/l	EPA 200.7
Manganese		498	15	0.70	ug/l	EPA 200.7
Hydrogen Sulfide		0.64 J	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [a]		0.073 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.071 J	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.064 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Nitrate [c]		2.3 J	2.5	1.3	mg/l	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl		2.0	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		4130	500	50	mg/l	SM19 2540C
Sulfate		3280	100	30	mg/l	EPA 300/SW846 9056A
FA1176-3F	**SS61-MW23**					
Manganese		439	15	0.70	ug/l	EPA 200.7
FA1176-4	**TRIP BLANK**					
No hits reported in this sample.						
FA1176-5	**SS61-MW21**					
Benzene		432	5.0	1.1	ug/l	SW846 8260B
sec-Butylbenzene		3.0 J	5.0	1.1	ug/l	SW846 8260B
tert-Butylbenzene		3.7 J	5.0	1.5	ug/l	SW846 8260B
m-Dichlorobenzene		2.5 J	5.0	1.3	ug/l	SW846 8260B
o-Dichlorobenzene		9.8	5.0	1.1	ug/l	SW846 8260B
p-Dichlorobenzene		3.7 J	5.0	1.0	ug/l	SW846 8260B
Ethylbenzene		216	5.0	1.5	ug/l	SW846 8260B
Isopropylbenzene		353	20	4.0	ug/l	SW846 8260B
n-Propylbenzene		26.2	5.0	1.1	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		10.1	10	1.0	ug/l	SW846 8260B
Toluene		29.8	5.0	1.0	ug/l	SW846 8260B
m,p-Xylene		52.3	10	1.5	ug/l	SW846 8260B
o-Xylene		28.0	5.0	1.0	ug/l	SW846 8260B
1,2-Dichlorobenzene		7.5	4.8	0.65	ug/l	SW846 8270D
1,3-Dichlorobenzene		2.3 J	4.8	0.75	ug/l	SW846 8270D
1,4-Dichlorobenzene		2.8 J	4.8	0.67	ug/l	SW846 8270D
TPH-GRO (C6-C10)		0.545	0.20	0.10	mg/l	SW846 8015C
TPH (C10-C22)		0.451	0.24	0.095	mg/l	SW846 8015C
Iron		780	300	29	ug/l	EPA 200.7
Manganese		1380	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		16.7	8.0	8.0	mg/l	SM19 5210B
Chemical Oxygen Demand		44.7	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		13.6	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [a]		0.52	0.40	0.059	mg/l	SM18 3500FED M

Summary of Hits

Job Number: FA1176
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 01/23/13 thru 01/24/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Iron, Ferrous [b]		0.26	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.067 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		1.0	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5390	500	50	mg/l	SM19 2540C
Sulfate		3570	100	30	mg/l	EPA 300/SW846 9056A
FA1176-5F	**SS61-MW21**					
Manganese		1480	15	0.70	ug/l	EPA 200.7
FA1176-6	**TRIP BLANK**					
No hits reported in this sample.						
FA1176-7	**SS61-MW21-A**					
Benzene [d]		201	10	2.1	ug/l	SW846 8260B
sec-Butylbenzene [e]		2.0	2.0	0.42	ug/l	SW846 8260B
tert-Butylbenzene [e]		2.8	2.0	0.59	ug/l	SW846 8260B
m-Dichlorobenzene [e]		2.7	2.0	0.51	ug/l	SW846 8260B
o-Dichlorobenzene [e]		8.8	2.0	0.43	ug/l	SW846 8260B
p-Dichlorobenzene [e]		2.9	2.0	0.40	ug/l	SW846 8260B
Ethylbenzene [e]		142	2.0	0.58	ug/l	SW846 8260B
Isopropylbenzene [d]		204	10	2.0	ug/l	SW846 8260B
n-Propylbenzene [e]		16.8	2.0	0.45	ug/l	SW846 8260B
1,2,4-Trimethylbenzene [e]		6.9	4.0	0.40	ug/l	SW846 8260B
Toluene [e]		19.0	2.0	0.40	ug/l	SW846 8260B
Trichloroethylene [e]		1.1 J	2.0	0.63	ug/l	SW846 8260B
m,p-Xylene [e]		33.4	4.0	0.59	ug/l	SW846 8260B
o-Xylene [e]		18.4	2.0	0.40	ug/l	SW846 8260B
1,2-Dichlorobenzene		8.1	4.8	0.65	ug/l	SW846 8270D
1,3-Dichlorobenzene		2.5 J	4.8	0.75	ug/l	SW846 8270D
1,4-Dichlorobenzene		3.1 J	4.8	0.67	ug/l	SW846 8270D
TPH-GRO (C6-C10)		1.75	0.50	0.25	mg/l	SW846 8015C
TPH (C10-C22)		0.259	0.24	0.095	mg/l	SW846 8015C
Iron		652	300	29	ug/l	EPA 200.7
Manganese		1400	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		17.1	12	12	mg/l	SM19 5210B
Chemical Oxygen Demand		52.2	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		14.0	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [a]		0.22 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.43	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.062 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		0.52 J	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		4890	500	50	mg/l	SM19 2540C

Summary of Hits

Job Number: FA1176
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 01/23/13 thru 01/24/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Sulfate		3400	100	30	mg/l	EPA 300/SW846 9056A
FA1176-7F	**SS61-MW21-A**					
Manganese		1470	15	0.70	ug/l	EPA 200.7
FA1176-8	**TRIP BLANK**					

No hits reported in this sample.

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.
(d) Sample vial(s) contained significant headspace; reported results are considered minimum values.
(e) Results from different vials are not consistent; higher results were reported.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13590.D	5	01/31/13	EG	n/a	n/a	VP528
Run #2	P13603.D	25	01/31/13	EG	n/a	n/a	VP528

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	130	50	ug/l	
107-02-8	Acrolein	ND	100	35	ug/l	
107-13-1	Acrylonitrile	ND	50	10	ug/l	
71-43-2	Benzene	61.0	5.0	1.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/l	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/l	
75-25-2	Bromoform	ND	5.0	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	7.0	5.0	1.1	ug/l	
98-06-6	tert-Butylbenzene	7.5	5.0	1.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	5.0	1.3	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	1.1	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	25	6.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	1.2	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	3.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	1.5	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.3	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	1.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.5	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	5.0	1.3	ug/l	
95-50-1	o-Dichlorobenzene	1.6	5.0	1.1	ug/l	J
106-46-7	p-Dichlorobenzene	ND	5.0	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.1	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	519 [b]	25	7.3	ug/l	
591-78-6	2-Hexanone [a]	ND	50	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.5	ug/l	
110-54-3	Hexane	ND	10	4.4	ug/l	
98-82-8	Isopropylbenzene	1030 [b]	25	5.0	ug/l	
99-87-6	p-Isopropyltoluene	1.2	5.0	1.0	ug/l	J
108-10-1	4-Methyl-2-pentanone	ND	25	11	ug/l	
74-83-9	Methyl bromide	ND	10	3.9	ug/l	
74-87-3	Methyl chloride	ND	10	2.5	ug/l	
74-95-3	Methylene bromide	ND	10	1.7	ug/l	
75-09-2	Methylene chloride	ND	25	10	ug/l	
78-93-3	Methyl ethyl ketone [a]	ND	25	16	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	25	5.0	ug/l	
103-65-1	n-Propylbenzene	46.3	5.0	1.1	ug/l	
100-42-5	Styrene	ND	5.0	1.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.2	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	2.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	174	10	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	14.1	10	1.0	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.6	ug/l	
108-88-3	Toluene	28.3	5.0	1.0	ug/l	
79-01-6	Trichloroethylene	ND	5.0	1.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	2.2	ug/l	
108-05-4	Vinyl Acetate	ND	50	16	ug/l	
	m,p-Xylene	446	10	1.5	ug/l	
95-47-6	o-Xylene	145	5.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	97%	87-116%
17060-07-0	1,2-Dichloroethane-D4	109%	106%	76-127%
2037-26-5	Toluene-D8	98%	99%	86-112%
460-00-4	4-Bromofluorobenzene	101%	101%	84-120%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T006218.D	1	01/30/13	NAF	01/28/13	OP45409	ST305
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	17.9	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	0.73	4.8	0.69	ug/l	J
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	0.86	4.8	0.53	ug/l	J
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	1.5	4.8	0.65	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	1.8	4.8	0.61	ug/l	J
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		14-62%
4165-62-2	Phenol-d5	35%		10-40%
118-79-6	2,4,6-Tribromophenol	87%		33-118%
4165-60-0	Nitrobenzene-d5	83%		42-108%
321-60-8	2-Fluorobiphenyl	81%		40-106%
1718-51-0	Terphenyl-d14	83%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120383.D	10	01/28/13	CP	n/a	n/a	GCD4907
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	7.07	1.0	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	125%		57-129%
98-08-8	aaa-Trifluorotoluene	111%		58-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35162.D	1	02/05/13	SJL	01/29/13	OP45413	GYY1279
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	1.40	0.24	0.095	mg/l	
	TPH (> C22-C36)	ND	0.24	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	110%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	904	300	29	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	400	15	0.70	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10497
(2) Prep QC Batch: MP24535

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	8.0 U	8.0	8.0	mg/l	4	01/25/13 13:20	AA	SM19 5210B
Chemical Oxygen Demand	57.1	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	01/26/13 10:15	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.67	0.40	0.059	mg/l	1	01/29/13 13:05	LM	SM18 3500FED M
Iron, Ferrous [b]	0.23	0.10	0.030	mg/l	1	01/25/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.061 J	0.10	0.030	mg/l	1	01/30/13 13:59	VK	EPA 350.1
Nitrogen, Nitrate [c]	2.5 U	5.0	2.5	mg/l	50	01/25/13 14:56	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	0.99	0.53	0.17	mg/l	1	01/30/13 11:09	TC	EPA 351.2
Solids, Total Dissolved	5130	500	50	mg/l	5	01/30/13	MG	SM19 2540C
Sulfate	3630	100	30	mg/l	50	01/25/13 14:56	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample received near end of hold time, analyzed as soon as possible. Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA1176-1F	**Date Sampled:**	01/23/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	392	15	0.70	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10497
(2) Prep QC Batch: MP24535

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-2	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13586.D	1	01/31/13	EG	n/a	n/a	VP528
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-2	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	7.1	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone [a]	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-2	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	107%		76-127%
2037-26-5	Toluene-D8	99%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13591.D	1	01/31/13	EG	n/a	n/a	VP528
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.68	1.0	0.29	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone [a]	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		87-116%
17060-07-0	1,2-Dichloroethane-D4	112%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U036051.D	1	01/31/13	NAF	01/28/13	OP45409	SU1702
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	55%		14-62%
4165-62-2	Phenol-d5	42%		10-40%
118-79-6	2,4,6-Tribromophenol	98%		33-118%
4165-60-0	Nitrobenzene-d5	89%		42-108%
321-60-8	2-Fluorobiphenyl	86%		40-106%
1718-51-0	Terphenyl-d14	99%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120433.D	1	01/31/13	CP	n/a	n/a	GCD4911
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.0709	0.10	0.050	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		57-129%
98-08-8	aaa-Trifluorotoluene	97%		58-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35163.D	1	02/05/13	SJL	01/29/13	OP45413	GYY1279
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.187	0.24	0.097	mg/l	J
	TPH (> C22-C36)	ND	0.24	0.097	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	144 J	300	29	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	498	15	0.70	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10497
(2) Prep QC Batch: MP24535

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3	**Date Sampled:**	01/23/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	4.0 U	4.0	4.0	mg/l	2	01/25/13 13:20	AA	SM19 5210B
Chemical Oxygen Demand	5.3 U	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	0.64 J	1.0	0.50	mg/l	1	01/26/13 10:15	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.073 J	0.40	0.059	mg/l	1	01/29/13 13:40	LM	SM18 3500FED M
Iron, Ferrous [b]	0.071 J	0.10	0.030	mg/l	1	01/25/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.064 J	0.10	0.030	mg/l	1	01/30/13 14:00	VK	EPA 350.1
Nitrogen, Nitrate [c]	2.3 J	2.5	1.3	mg/l	25	01/25/13 15:12	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	2.0	0.53	0.17	mg/l	1	01/30/13 11:12	TC	EPA 351.2
Solids, Total Dissolved	4130	500	50	mg/l	5	01/30/13	MG	SM19 2540C
Sulfate	3280	100	30	mg/l	50	01/25/13 19:26	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA1176-3F	**Date Sampled:**	01/23/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	439	15	0.70	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10497
(2) Prep QC Batch: MP24535

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-4	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13587.D	1	01/31/13	EG	n/a	n/a	VP528
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-4	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone [a]	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-4	**Date Sampled:**	01/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	106%		76-127%
2037-26-5	Toluene-D8	99%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13605.D	5	01/31/13	EG	n/a	n/a	VP528
Run #2	P13592.D	20	01/31/13	EG	n/a	n/a	VP528

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	130	50	ug/l	
107-02-8	Acrolein	ND	100	35	ug/l	
107-13-1	Acrylonitrile	ND	50	10	ug/l	
71-43-2	Benzene	432	5.0	1.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/l	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/l	
75-25-2	Bromoform	ND	5.0	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	3.0	5.0	1.1	ug/l	J
98-06-6	tert-Butylbenzene	3.7	5.0	1.5	ug/l	J
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	5.0	1.3	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	1.1	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	25	6.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	1.2	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	3.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	1.5	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.3	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	1.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.5	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	2.5	5.0	1.3	ug/l	J
95-50-1	o-Dichlorobenzene	9.8	5.0	1.1	ug/l	
106-46-7	p-Dichlorobenzene	3.7	5.0	1.0	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.1	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	216	5.0	1.5	ug/l	
591-78-6	2-Hexanone [a]	ND	50	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.5	ug/l	
110-54-3	Hexane	ND	10	4.4	ug/l	
98-82-8	Isopropylbenzene	353 [b]	20	4.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	25	11	ug/l	
74-83-9	Methyl bromide	ND	10	3.9	ug/l	
74-87-3	Methyl chloride	ND	10	2.5	ug/l	
74-95-3	Methylene bromide	ND	10	1.7	ug/l	
75-09-2	Methylene chloride	ND	25	10	ug/l	
78-93-3	Methyl ethyl ketone [a]	ND	25	16	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	25	5.0	ug/l	
103-65-1	n-Propylbenzene	26.2	5.0	1.1	ug/l	
100-42-5	Styrene	ND	5.0	1.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.2	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	2.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	10.1	10	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	1.0	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.6	ug/l	
108-88-3	Toluene	29.8	5.0	1.0	ug/l	
79-01-6	Trichloroethylene	ND	5.0	1.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	2.2	ug/l	
108-05-4	Vinyl Acetate	ND	50	16	ug/l	
	m,p-Xylene	52.3	10	1.5	ug/l	
95-47-6	o-Xylene	28.0	5.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	98%	87-116%
17060-07-0	1,2-Dichloroethane-D4	106%	111%	76-127%
2037-26-5	Toluene-D8	98%	98%	86-112%
460-00-4	4-Bromofluorobenzene	101%	108%	84-120%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U036042.D	1	01/31/13	NAF	01/30/13	OP45439	SU1702
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	7.5	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	2.3	4.8	0.75	ug/l	J
106-46-7	1,4-Dichlorobenzene	2.8	4.8	0.67	ug/l	J
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		14-62%
4165-62-2	Phenol-d5	37%		10-40%
118-79-6	2,4,6-Tribromophenol	86%		33-118%
4165-60-0	Nitrobenzene-d5	83%		42-108%
321-60-8	2-Fluorobiphenyl	80%		40-106%
1718-51-0	Terphenyl-d14	85%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120434.D	2	01/31/13	CP	n/a	n/a	GCD4911
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.545	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	110%		57-129%
98-08-8	aaa-Trifluorotoluene	109%		58-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35164.D	1	02/05/13	SJL	01/29/13	OP45413	GYY1279
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.451	0.24	0.095	mg/l	
	TPH (> C22-C36)	ND	0.24	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	780	300	29	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	1380	15	0.70	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10497
(2) Prep QC Batch: MP24535

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	16.7	8.0	8.0	mg/l	4	01/25/13 13:20	AA	SM19 5210B
Chemical Oxygen Demand	44.7	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	13.6	1.0	0.50	mg/l	1	01/26/13 10:15	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.52	0.40	0.059	mg/l	1	01/29/13 13:44	LM	SM18 3500FED M
Iron, Ferrous [b]	0.26	0.10	0.030	mg/l	1	01/25/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.067 J	0.10	0.030	mg/l	1	02/01/13 11:18	VK	EPA 350.1
Nitrogen, Nitrate [c]	2.5 U	5.0	2.5	mg/l	50	01/25/13 15:28	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.0	0.53	0.17	mg/l	1	01/30/13 11:13	TC	EPA 351.2
Solids, Total Dissolved	5390	500	50	mg/l	5	01/30/13	MG	SM19 2540C
Sulfate	3570	100	30	mg/l	50	01/25/13 15:28	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA1176-5F	**Date Sampled:**	01/24/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	1480	15	0.70	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10497
(2) Prep QC Batch: MP24535

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-6	**Date Sampled:**	01/24/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13588.D	1	01/31/13	EG	n/a	n/a	VP528
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-6	**Date Sampled:**	01/24/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone [a]	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-6	**Date Sampled:**	01/24/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	107%		76-127%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	99%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	P13709.D	2	02/06/13	EG	n/a	n/a	VP532
Run #2 [b]	P13748.D	10	02/07/13	EG	n/a	n/a	VP533

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [c]	ND	50	20	ug/l	
107-02-8	Acrolein	ND	40	14	ug/l	
107-13-1	Acrylonitrile	ND	20	4.0	ug/l	
71-43-2	Benzene	201 [d]	10	2.1	ug/l	
108-86-1	Bromobenzene	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	2.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.40	ug/l	
75-25-2	Bromoform	ND	2.0	0.69	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.40	ug/l	
135-98-8	sec-Butylbenzene	2.0	2.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	2.8	2.0	0.59	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.40	ug/l	
75-00-3	Chloroethane	ND	4.0	1.0	ug/l	
67-66-3	Chloroform	ND	2.0	0.53	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.43	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.40	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	4.0	0.99	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.43	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.40	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.60	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.44	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.52	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.54	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.49	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	4.0	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.44	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	2.7	2.0	0.51	ug/l	
95-50-1	o-Dichlorobenzene	8.8	2.0	0.43	ug/l	
106-46-7	p-Dichlorobenzene	2.9	2.0	0.40	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.46	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.42	ug/l	
100-41-4	Ethylbenzene	142	2.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	20	4.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.0	1.0	ug/l	
110-54-3	Hexane	ND	4.0	1.8	ug/l	
98-82-8	Isopropylbenzene	204 [d]	10	2.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.40	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	4.5	ug/l	
74-83-9	Methyl bromide	ND	4.0	1.6	ug/l	
74-87-3	Methyl chloride	ND	4.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	4.0	0.69	ug/l	
75-09-2	Methylene chloride	ND	10	4.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	6.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.42	ug/l	
91-20-3	Naphthalene	ND	10	2.0	ug/l	
103-65-1	n-Propylbenzene	16.8	2.0	0.45	ug/l	
100-42-5	Styrene	ND	2.0	0.40	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.40	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.48	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	4.0	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	6.9	4.0	0.40	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	4.0	0.40	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.64	ug/l	
108-88-3	Toluene	19.0	2.0	0.40	ug/l	
79-01-6	Trichloroethylene	1.1	2.0	0.63	ug/l	J
75-69-4	Trichlorofluoromethane	ND	4.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.88	ug/l	
108-05-4	Vinyl Acetate	ND	20	6.3	ug/l	
	m,p-Xylene	33.4	4.0	0.59	ug/l	
95-47-6	o-Xylene	18.4	2.0	0.40	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	98%	87-116%
17060-07-0	1,2-Dichloroethane-D4	106%	91%	76-127%
2037-26-5	Toluene-D8	97%	100%	86-112%
460-00-4	4-Bromofluorobenzene	101%	102%	84-120%

(a) Results from different vials are not consistent; higher results were reported.
(b) Sample vial(s) contained significant headspace; reported results are considered minimum values.
(c) Associated BS recovery outside control limits.
(d) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U036043.D	1	01/31/13	NAF	01/30/13	OP45439	SU1702
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	8.1	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	2.5	4.8	0.75	ug/l	J
106-46-7	1,4-Dichlorobenzene	3.1	4.8	0.67	ug/l	J
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		14-62%
4165-62-2	Phenol-d5	41% [a]		10-40%
118-79-6	2,4,6-Tribromophenol	91%		33-118%
4165-60-0	Nitrobenzene-d5	85%		42-108%
321-60-8	2-Fluorobiphenyl	83%		40-106%
1718-51-0	Terphenyl-d14	88%		39-121%

(a) Outside control limits due to matrix interference. Confirmed by MS/MSD.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD120512.D	5	02/05/13	CP	n/a	n/a	GCD4914
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.75	0.50	0.25	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	112%		57-129%
98-08-8	aaa-Trifluorotoluene	105%		58-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY35165.D	1	02/05/13	SJL	01/29/13	OP45413	GYY1279
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.259	0.24	0.095	mg/l	
	TPH (> C22-C36)	ND	0.24	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		42-114%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	652	300	29	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	1400	15	0.70	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10497
(2) Prep QC Batch: MP24535

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7	**Date Sampled:**	01/24/13
Matrix:	AQ - Ground Water	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	17.1	12	12	mg/l	6	01/25/13 13:20	AA	SM19 5210B
Chemical Oxygen Demand	52.2	20	5.3	mg/l	1	01/31/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	14.0	1.0	0.50	mg/l	1	01/26/13 10:15	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.22 J	0.40	0.059	mg/l	1	01/29/13 13:49	LM	SM18 3500FED M
Iron, Ferrous [b]	0.43	0.10	0.030	mg/l	1	01/25/13 12:10	LE	SM18 3500FED
Nitrogen, Ammonia	0.062 J	0.10	0.030	mg/l	1	02/01/13 11:08	VK	EPA 350.1
Nitrogen, Nitrate [c]	2.5 U	5.0	2.5	mg/l	50	01/25/13 16:15	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	0.52 J	0.53	0.17	mg/l	1	01/30/13 11:14	TC	EPA 351.2
Solids, Total Dissolved	4890	500	50	mg/l	5	01/30/13	MG	SM19 2540C
Sulfate	3400	100	30	mg/l	50	01/25/13 16:15	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW21-A		
Lab Sample ID:	FA1176-7F	**Date Sampled:**	01/24/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	01/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	1470	15	0.70	ug/l	1	01/29/13	01/29/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10497
(2) Prep QC Batch: MP24535

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-8	**Date Sampled:**	01/24/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P13589.D	1	01/31/13	EG	n/a	n/a	VP528
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-8	**Date Sampled:**	01/24/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone [a]	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA1176-8	**Date Sampled:**	01/24/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	108%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

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Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA1176

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 01-24-2013-1
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1	SS61-MW24	01/23/2013	1450	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				1
2	Trip Blank	1-23-2013		-	TB	1	WG	1	X													1

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	1-24-2013	1600	1. FP		
2. FP	01-25-13	930	2. RWeller	1-25-13	930
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest
Lab Recipient:
Shipped No.:
Airbill Number: 7545 9213 9147
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

20.1162472-0

5.1 5

FA1176: Chain of Custody
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FA1176

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 1-24-2013-7
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Code ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
3	SS61-MW23	1-23-2013	1530	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				2
4	Trip Blank	1-23-2013		-	TB	1	AQ	1	X													2
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	1-24-2013	1600	1. FP		
2. FP	01-25-13	930	2. RW [signature]	1-25-13	930
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 9745 9213 9813
Analytical Lab: Accutest
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA1176: Chain of Custody
Page 2 of 5

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FA1176

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 1-24-2013-3
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
5	SS61-MW21	01/24/2013	0920	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				3
6	Trip Blank	01/24/2013		-	TB	1	AQ	1	X													3
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	1-24-2013	1600	1. FO		
2. FO	1-25-13	930	2. RWilson	1-25-13	930
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7945 9213 9180
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

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FA1176

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 1-24-2013-4
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q3)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck / Tony Lucero

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
7 SS61-MW21-A	01/24/2013	0920	-	FD	1	WG	18	X	X	X	X	X	X	X	X	X	X				4
8 Trip Blank	01/24/2013		-	TB	1	AQ	1	X													4
			-																		
			-																		
			-																		
			-																		
			-																		
			-																		
			-																		

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	1-24-2013	1640	1. FE		
2. FE	1-25-13	930	2. [signature]	1-25-13	930
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7945 9213 9938
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA1176: Chain of Custody
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ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA1176 CLIENT: Bhate PROJECT: SS-61

DATE/TIME RECEIVED: 01-25-13 930 (MM/DD/YY 24:00) NIMBER OF COOLERS RECEIVED: 4

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7945 9213 9147

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [x] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 1.6 1.2 2.0 1.6
- [ ] CORRECTED TEMPS: 2.0, 1.6, 2.4, 2.0

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [x] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM____ 5-GRAM____

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ? 4

SUMMARY OF COMMENTS: Samples 6,8 have headspace

TECHNICIAN SIGNATURE/DATE R Willen 01-25-13 REVIEWER SIGNATURE/DATE [signature] 01/25/13

NF 12/10

receipt confirmation 122910.xls

5.1

5

FA1176: Chain of Custody

Page 5 of 5

Southeast
ACCUTEST LABORATORIES

06/26/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA3526

Sampling Dates: 04/08/13 - 04/09/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **76**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), AK, AR, GA, KY, MA, NV, OK, UT, VA, WA, WI

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Test results relate only to samples analyzed.

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Sample Summary

Bhate Environmental

Job No: FA3526

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA3526-1	04/08/13	16:15	DM	04/10/13	SO	Soil	SS61-SB68B-27
FA3526-2	04/08/13	18:30	DM	04/10/13	SO	Soil	SS61-SB69B-30
FA3526-3	04/09/13	10:10	DM	04/10/13	SO	Soil	SS61-SB70B-28
FA3526-4	04/09/13	12:15	DM	04/10/13	SO	Soil	SS61-SB71B-28
FA3526-5	04/08/13	00:00	DM	04/10/13	SO	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA3526

Site: Holloman AFB; SS61 VCM **Report Date** 4/23/2013 10:22:59 PM

4 Samples and 1 Trip Blank were collected between 04/08/2013 and 04/09/2013 and were received at Accutest SE on 04/10/2013 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA3526. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO **Batch ID:** VY368

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3509-2MS, FA3509-2MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Hexachlorobutadiene, n-Butylbenzene, Naphthalene, o-Dichlorobenzene, p-Dichlorobenzene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Hexachlorobutadiene, m-Dichlorobenzene, n-Butylbenzene, Naphthalene, o-Dichlorobenzene, p-Dichlorobenzene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP46416

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3550-2MS, FA3550-2MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Benzo(a)anthracene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic Acid, Chrysene, Hexachlorocyclopentadiene, Pentachlorophenol, Pyrene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 4,6-Dinitro-o-cresol, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzoic Acid, Chrysene, Hexachlorocyclopentadiene, Pentachlorophenol, Pyrene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

OP46416-MS: Dilution required due to matrix interference; extract was viscous.

OP46416-MSD: Dilution required due to matrix interference; extract was viscous.

Volatiles by GC By Method SW846 8015C

Matrix: SO **Batch ID:** GQR3260

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3561-4MS, FA3561-4MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** GUU138

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3448-8MS, FA3448-8MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: SO **Batch ID:** OP46431

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3526-2MS, FA3526-2MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for TPH (C10-C22) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for TPH (>C22-C36) are outside control limits for sample OP46431-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) OP46431-MS has surrogates outside control limits. Probable cause is due to matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN55325

Sample(s) FA3518-1DUP was used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: April 23, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA3526
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/08/13 thru 04/09/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA3526-1	**SS61-SB68B-27**					
Carbon disulfide		2.2 J	4.8	1.9	ug/kg	SW846 8260B
FA3526-2	**SS61-SB69B-30**					
Acetone		20.0 J	35	14	ug/kg	SW846 8260B
1,2-Dichloroethane		3.1 J	3.5	0.84	ug/kg	SW846 8260B
FA3526-3	**SS61-SB70B-28**					
sec-Butylbenzene		156	4.4	1.1	ug/kg	SW846 8260B
tert-Butylbenzene		1040	360	86	ug/kg	SW846 8260B
Carbon disulfide		5.4	4.4	1.8	ug/kg	SW846 8260B
Isopropylbenzene		112	4.4	1.2	ug/kg	SW846 8260B
Benzo(a)anthracene		33.4 J	240	24	ug/kg	SW846 8270D
Benzo(b)fluoranthene		25.2 J	240	24	ug/kg	SW846 8270D
Chrysene		31.5 J	240	24	ug/kg	SW846 8270D
Fluoranthene		71.0 J	240	24	ug/kg	SW846 8270D
Pyrene		62.5 J	240	24	ug/kg	SW846 8270D
TPH-GRO (C6-C10)		507	140	70	mg/kg	SW846 8015C
TPH (C10-C22)		10.8 J	12	4.8	mg/kg	SW846 8015C
FA3526-4	**SS61-SB71B-28**					
Carbon disulfide		2.1 J	3.5	1.4	ug/kg	SW846 8260B
FA3526-5	**TRIP BLANK**					

No hits reported in this sample.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-SB68B-27		
Lab Sample ID:	FA3526-1	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y8411.D	1	04/10/13	EP	n/a	n/a	VY368
Run #2							

	Initial Weight
Run #1	7.14 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	48	19	ug/kg	
107-02-8	Acrolein	ND	24	8.3	ug/kg	
107-13-1	Acrylonitrile	ND	24	9.5	ug/kg	
71-43-2	Benzene	ND	4.8	0.95	ug/kg	
108-86-1	Bromobenzene	ND	4.8	1.0	ug/kg	
74-97-5	Bromochloromethane	ND	4.8	1.3	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	1.3	ug/kg	
75-25-2	Bromoform	ND	4.8	0.95	ug/kg	
104-51-8	n-Butylbenzene	ND	4.8	1.2	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.8	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.8	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	0.95	ug/kg	
75-00-3	Chloroethane	ND	4.8	1.9	ug/kg	
67-66-3	Chloroform	ND	4.8	0.95	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.8	0.95	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.8	1.1	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	24	9.5	ug/kg	
75-15-0	Carbon disulfide	2.2	4.8	1.9	ug/kg	J
56-23-5	Carbon tetrachloride	ND	4.8	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	0.95	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.8	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.8	0.95	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.8	2.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.8	0.95	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.8	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	0.95	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.8	0.95	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.8	0.95	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	0.95	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.8	0.95	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.8	0.95	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.95	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68B-27		
Lab Sample ID:	FA3526-1	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	4.8	0.95	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.8	1.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.8	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.8	0.95	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	0.95	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	1.0	ug/kg	
591-78-6	2-Hexanone	ND	24	4.8	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.8	1.9	ug/kg	
110-54-3	Hexane	ND	4.8	2.2	ug/kg	
98-82-8	Isopropylbenzene	ND	4.8	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.8	1.2	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	24	4.8	ug/kg	
74-83-9	Methyl bromide	ND	4.8	1.9	ug/kg	
74-87-3	Methyl chloride	ND	4.8	2.0	ug/kg	
74-95-3	Methylene bromide	ND	4.8	0.99	ug/kg	
75-09-2	Methylene chloride	ND	9.5	4.4	ug/kg	
78-93-3	Methyl ethyl ketone	ND	24	4.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.8	0.95	ug/kg	
91-20-3	Naphthalene	ND	4.8	1.9	ug/kg	
103-65-1	n-Propylbenzene	ND	4.8	0.98	ug/kg	
100-42-5	Styrene	ND	4.8	0.95	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.8	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	0.95	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	0.95	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.95	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.8	1.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.8	1.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	1.1	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.8	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.8	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.8	1.1	ug/kg	
108-88-3	Toluene	ND	4.8	0.95	ug/kg	
79-01-6	Trichloroethylene	ND	4.8	0.95	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	1.9	ug/kg	
75-01-4	Vinyl chloride	ND	4.8	0.95	ug/kg	
108-05-4	Vinyl Acetate	ND	24	3.9	ug/kg	
	m,p-Xylene	ND	9.5	2.0	ug/kg	
95-47-6	o-Xylene	ND	4.8	0.95	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68B-27		
Lab Sample ID:	FA3526-1	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		75-124%
2037-26-5	Toluene-D8	102%		75-126%
460-00-4	4-Bromofluorobenzene	102%		71-133%
17060-07-0	1,2-Dichloroethane-D4	102%		72-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68B-27		
Lab Sample ID:	FA3526-1	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T007352.D	1	04/12/13	FS	04/12/13	OP46416	ST357
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1100	230	ug/kg	
95-57-8	2-Chlorophenol	ND	230	26	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	230	25	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	230	25	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	230	33	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	230	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	450	90	ug/kg	
95-48-7	2-Methylphenol	ND	230	28	ug/kg	
	3&4-Methylphenol	ND	230	47	ug/kg	
88-75-5	2-Nitrophenol	ND	230	34	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	180	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	180	ug/kg	
108-95-2	Phenol	ND	230	37	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	230	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	230	29	ug/kg	
83-32-9	Acenaphthene	ND	230	27	ug/kg	
208-96-8	Acenaphthylene	ND	230	26	ug/kg	
62-53-3	Aniline	ND	230	72	ug/kg	
120-12-7	Anthracene	ND	230	23	ug/kg	
92-87-5	Benzidine	ND	2300	530	ug/kg	
56-55-3	Benzo(a)anthracene	ND	230	23	ug/kg	
50-32-8	Benzo(a)pyrene	ND	230	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	230	23	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	230	23	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	230	27	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	230	29	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	230	45	ug/kg	
100-51-6	Benzyl Alcohol	ND	230	45	ug/kg	
91-58-7	2-Chloronaphthalene	ND	230	29	ug/kg	
106-47-8	4-Chloroaniline	ND	230	34	ug/kg	
86-74-8	Carbazole	ND	230	25	ug/kg	
218-01-9	Chrysene	ND	230	23	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68B-27		
Lab Sample ID:	FA3526-1	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	230	32	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	230	30	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	230	26	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	230	24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	230	23	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	230	25	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	230	30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	230	24	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	230	23	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	230	27	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	230	38	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	230	23	ug/kg	
132-64-9	Dibenzofuran	ND	230	23	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	450	45	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	230	45	ug/kg	
84-66-2	Diethyl phthalate	ND	450	45	ug/kg	
131-11-3	Dimethyl phthalate	ND	230	45	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	450	45	ug/kg	
206-44-0	Fluoranthene	ND	230	23	ug/kg	
86-73-7	Fluorene	ND	230	25	ug/kg	
118-74-1	Hexachlorobenzene	ND	230	23	ug/kg	
87-68-3	Hexachlorobutadiene	ND	230	25	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	230	31	ug/kg	
67-72-1	Hexachloroethane	ND	230	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	230	23	ug/kg	
78-59-1	Isophorone	ND	230	25	ug/kg	
90-12-0	1-Methylnaphthalene	ND	230	31	ug/kg	
91-57-6	2-Methylnaphthalene	ND	230	26	ug/kg	
88-74-4	2-Nitroaniline	ND	230	33	ug/kg	
99-09-2	3-Nitroaniline	ND	230	32	ug/kg	
100-01-6	4-Nitroaniline	ND	230	48	ug/kg	
91-20-3	Naphthalene	ND	230	23	ug/kg	
98-95-3	Nitrobenzene	ND	230	33	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	450	32	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	230	25	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	230	45	ug/kg	
85-01-8	Phenanthrene	ND	230	23	ug/kg	
129-00-0	Pyrene	ND	230	23	ug/kg	
110-86-1	Pyridine	ND	450	52	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	230	24	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68B-27		
Lab Sample ID:	FA3526-1	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	72%		40-102%
4165-62-2	Phenol-d5	74%		41-100%
118-79-6	2,4,6-Tribromophenol	81%		42-108%
4165-60-0	Nitrobenzene-d5	81%		40-105%
321-60-8	2-Fluorobiphenyl	75%		43-107%
1718-51-0	Terphenyl-d14	100%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68B-27		
Lab Sample ID:	FA3526-1	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8015C	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UU002601.D	1	04/16/13	MM	n/a	n/a	GUU138
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.13 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.6	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	86%		56-149%
98-08-8	aaa-Trifluorotoluene	84%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68B-27		
Lab Sample ID:	FA3526-1	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY36307.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	11	4.5	mg/kg	
	TPH (> C22-C36)	ND	11	4.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69B-30		
Lab Sample ID:	FA3526-2	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	82.3
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y8412.D	1	04/10/13	EP	n/a	n/a	VY368
Run #2							

	Initial Weight
Run #1	8.71 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	20.0	35	14	ug/kg	J
107-02-8	Acrolein	ND	17	6.1	ug/kg	
107-13-1	Acrylonitrile	ND	17	7.0	ug/kg	
71-43-2	Benzene	ND	3.5	0.70	ug/kg	
108-86-1	Bromobenzene	ND	3.5	0.75	ug/kg	
74-97-5	Bromochloromethane	ND	3.5	0.98	ug/kg	
75-27-4	Bromodichloromethane	ND	3.5	0.98	ug/kg	
75-25-2	Bromoform	ND	3.5	0.70	ug/kg	
104-51-8	n-Butylbenzene	ND	3.5	0.90	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.5	0.84	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.5	0.83	ug/kg	
108-90-7	Chlorobenzene	ND	3.5	0.70	ug/kg	
75-00-3	Chloroethane	ND	3.5	1.4	ug/kg	
67-66-3	Chloroform	ND	3.5	0.70	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.5	0.70	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.5	0.80	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	17	7.0	ug/kg	
75-15-0	Carbon disulfide	ND	3.5	1.4	ug/kg	
56-23-5	Carbon tetrachloride	ND	3.5	0.80	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.5	0.70	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.5	0.85	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.5	0.70	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.5	1.7	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.5	0.70	ug/kg	
107-06-2	1,2-Dichloroethane	3.1	3.5	0.84	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	3.5	0.70	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.5	0.70	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.5	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	3.5	0.70	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.5	0.70	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.5	0.70	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.5	0.70	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69B-30		
Lab Sample ID:	FA3526-2	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	82.3
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	3.5	0.70	ug/kg	
95-50-1	o-Dichlorobenzene	ND	3.5	0.76	ug/kg	
106-46-7	p-Dichlorobenzene	ND	3.5	0.91	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.5	0.70	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.5	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	3.5	0.77	ug/kg	
591-78-6	2-Hexanone	ND	17	3.5	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.5	1.4	ug/kg	
110-54-3	Hexane	ND	3.5	1.6	ug/kg	
98-82-8	Isopropylbenzene	ND	3.5	0.92	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.5	0.91	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	17	3.5	ug/kg	
74-83-9	Methyl bromide	ND	3.5	1.4	ug/kg	
74-87-3	Methyl chloride	ND	3.5	1.5	ug/kg	
74-95-3	Methylene bromide	ND	3.5	0.73	ug/kg	
75-09-2	Methylene chloride	ND	7.0	3.2	ug/kg	
78-93-3	Methyl ethyl ketone	ND	17	3.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.5	0.70	ug/kg	
91-20-3	Naphthalene	ND	3.5	1.4	ug/kg	
103-65-1	n-Propylbenzene	ND	3.5	0.72	ug/kg	
100-42-5	Styrene	ND	3.5	0.70	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.5	0.75	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.5	0.70	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.5	0.70	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.5	0.70	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.5	0.73	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.5	1.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.5	0.82	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.5	0.75	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.5	0.73	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.5	0.80	ug/kg	
108-88-3	Toluene	ND	3.5	0.70	ug/kg	
79-01-6	Trichloroethylene	ND	3.5	0.70	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.5	1.4	ug/kg	
75-01-4	Vinyl chloride	ND	3.5	0.70	ug/kg	
108-05-4	Vinyl Acetate	ND	17	2.9	ug/kg	
	m,p-Xylene	ND	7.0	1.4	ug/kg	
95-47-6	o-Xylene	ND	3.5	0.70	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69B-30		
Lab Sample ID:	FA3526-2	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	82.3
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		75-124%
2037-26-5	Toluene-D8	103%		75-126%
460-00-4	4-Bromofluorobenzene	98%		71-133%
17060-07-0	1,2-Dichloroethane-D4	99%		72-135%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69B-30		
Lab Sample ID:	FA3526-2	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	82.3
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T007353.D	1	04/12/13	FS	04/12/13	OP46416	ST357
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1000	200	ug/kg	
95-57-8	2-Chlorophenol	ND	200	23	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	22	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	29	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	200	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	400	80	ug/kg	
95-48-7	2-Methylphenol	ND	200	25	ug/kg	
	3&4-Methylphenol	ND	200	41	ug/kg	
88-75-5	2-Nitrophenol	ND	200	30	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	160	ug/kg	
87-86-5	Pentachlorophenol	ND	1000	160	ug/kg	
108-95-2	Phenol	ND	200	33	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	24	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	25	ug/kg	
83-32-9	Acenaphthene	ND	200	24	ug/kg	
208-96-8	Acenaphthylene	ND	200	23	ug/kg	
62-53-3	Aniline	ND	200	64	ug/kg	
120-12-7	Anthracene	ND	200	20	ug/kg	
92-87-5	Benzidine	ND	2000	470	ug/kg	
56-55-3	Benzo(a)anthracene	ND	200	20	ug/kg	
50-32-8	Benzo(a)pyrene	ND	200	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	200	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	200	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	200	24	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	25	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	200	40	ug/kg	
100-51-6	Benzyl Alcohol	ND	200	40	ug/kg	
91-58-7	2-Chloronaphthalene	ND	200	26	ug/kg	
106-47-8	4-Chloroaniline	ND	200	30	ug/kg	
86-74-8	Carbazole	ND	200	22	ug/kg	
218-01-9	Chrysene	ND	200	20	ug/kg	

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69B-30		
Lab Sample ID:	FA3526-2	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	82.3
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	200	28	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	27	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	200	23	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	200	20	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	200	22	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	200	26	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	200	21	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	200	21	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	200	24	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	200	33	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	200	20	ug/kg	
132-64-9	Dibenzofuran	ND	200	20	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	400	40	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	200	40	ug/kg	
84-66-2	Diethyl phthalate	ND	400	40	ug/kg	
131-11-3	Dimethyl phthalate	ND	200	40	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	400	40	ug/kg	
206-44-0	Fluoranthene	ND	200	20	ug/kg	
86-73-7	Fluorene	ND	200	22	ug/kg	
118-74-1	Hexachlorobenzene	ND	200	20	ug/kg	
87-68-3	Hexachlorobutadiene	ND	200	22	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/kg	
67-72-1	Hexachloroethane	ND	200	23	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	200	20	ug/kg	
78-59-1	Isophorone	ND	200	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	200	27	ug/kg	
91-57-6	2-Methylnaphthalene	ND	200	23	ug/kg	
88-74-4	2-Nitroaniline	ND	200	29	ug/kg	
99-09-2	3-Nitroaniline	ND	200	28	ug/kg	
100-01-6	4-Nitroaniline	ND	200	43	ug/kg	
91-20-3	Naphthalene	ND	200	20	ug/kg	
98-95-3	Nitrobenzene	ND	200	29	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	400	29	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	200	22	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	40	ug/kg	
85-01-8	Phenanthrene	ND	200	20	ug/kg	
129-00-0	Pyrene	ND	200	20	ug/kg	
110-86-1	Pyridine	ND	400	46	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	200	21	ug/kg	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69B-30		
Lab Sample ID:	FA3526-2	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	82.3
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%		40-102%
4165-62-2	Phenol-d5	75%		41-100%
118-79-6	2,4,6-Tribromophenol	81%		42-108%
4165-60-0	Nitrobenzene-d5	102%		40-105%
321-60-8	2-Fluorobiphenyl	77%		43-107%
1718-51-0	Terphenyl-d14	100%		45-119%

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RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69B-30		
Lab Sample ID:	FA3526-2	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8015C	**Percent Solids:**	82.3
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UU002602.D	1	04/16/13	MM	n/a	n/a	GUU138
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.94 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	4.9	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		56-149%
98-08-8	aaa-Trifluorotoluene	83%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69B-30		
Lab Sample ID:	FA3526-2	**Date Sampled:**	04/08/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	82.3
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY36308.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	10	4.0	mg/kg	
	TPH (> C22-C36)	ND	10	4.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70B-28		
Lab Sample ID:	FA3526-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	70.1
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y8413.D	1	04/10/13	EP	n/a	n/a	VY368
Run #2	Y8414.D	1	04/10/13	EP	n/a	n/a	VY368

	Initial Weight	Methanol Aliquot
Run #1	8.11 g	
Run #2	7.04 g	100 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	44	18	ug/kg	
107-02-8	Acrolein	ND	22	7.6	ug/kg	
107-13-1	Acrylonitrile	ND	22	8.8	ug/kg	
71-43-2	Benzene	ND	4.4	0.88	ug/kg	
108-86-1	Bromobenzene	ND	4.4	0.95	ug/kg	
74-97-5	Bromochloromethane	ND	4.4	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	4.4	1.2	ug/kg	
75-25-2	Bromoform	ND	4.4	0.88	ug/kg	
104-51-8	n-Butylbenzene	ND	4.4	1.1	ug/kg	
135-98-8	sec-Butylbenzene	156	4.4	1.1	ug/kg	
98-06-6	tert-Butylbenzene	1040 [a]	360	86	ug/kg	
108-90-7	Chlorobenzene	ND	4.4	0.88	ug/kg	
75-00-3	Chloroethane	ND	4.4	1.8	ug/kg	
67-66-3	Chloroform	ND	4.4	0.88	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.4	0.88	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.4	1.0	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	22	8.8	ug/kg	
75-15-0	Carbon disulfide	5.4	4.4	1.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.4	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.4	0.88	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.4	1.1	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.4	0.88	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.4	2.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.4	0.88	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.4	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.4	0.88	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.4	0.88	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.4	0.88	ug/kg	
124-48-1	Dibromochloromethane	ND	4.4	0.88	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.4	0.88	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.4	0.88	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.4	0.88	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70B-28		
Lab Sample ID:	FA3526-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	70.1
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	4.4	0.88	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.4	0.96	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.4	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.4	0.88	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.4	0.88	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	0.97	ug/kg	
591-78-6	2-Hexanone	ND	22	4.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.4	1.8	ug/kg	
110-54-3	Hexane	ND	4.4	2.0	ug/kg	
98-82-8	Isopropylbenzene	112	4.4	1.2	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.4	1.2	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	22	4.4	ug/kg	
74-83-9	Methyl bromide	ND	4.4	1.8	ug/kg	
74-87-3	Methyl chloride	ND	4.4	1.8	ug/kg	
74-95-3	Methylene bromide	ND	4.4	0.91	ug/kg	
75-09-2	Methylene chloride	ND	8.8	4.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	22	4.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.4	0.88	ug/kg	
91-20-3	Naphthalene	ND	4.4	1.8	ug/kg	
103-65-1	n-Propylbenzene	ND	4.4	0.91	ug/kg	
100-42-5	Styrene	ND	4.4	0.88	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.4	0.94	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.4	0.88	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.4	0.88	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.4	0.88	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.4	0.92	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.4	1.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	1.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.4	0.95	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.4	0.92	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.4	1.0	ug/kg	
108-88-3	Toluene	ND	4.4	0.88	ug/kg	
79-01-6	Trichloroethylene	ND	4.4	0.88	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.4	1.8	ug/kg	
75-01-4	Vinyl chloride	ND	4.4	0.88	ug/kg	
108-05-4	Vinyl Acetate	ND	22	3.6	ug/kg	
	m,p-Xylene	ND	8.8	1.8	ug/kg	
95-47-6	o-Xylene	ND	4.4	0.88	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70B-28		
Lab Sample ID:	FA3526-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	70.1
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	99%	75-124%
2037-26-5	Toluene-D8	87%	105%	75-126%
460-00-4	4-Bromofluorobenzene	103%	101%	71-133%
17060-07-0	1,2-Dichloroethane-D4	121%	102%	72-135%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70B-28		
Lab Sample ID:	FA3526-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	70.1
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T007354.D	1	04/12/13	FS	04/12/13	OP46416	ST357
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1200	240	ug/kg	
95-57-8	2-Chlorophenol	ND	240	28	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	240	26	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	240	26	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	240	35	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	240	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	470	94	ug/kg	
95-48-7	2-Methylphenol	ND	240	29	ug/kg	
	3&4-Methylphenol	ND	240	49	ug/kg	
88-75-5	2-Nitrophenol	ND	240	35	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	190	ug/kg	
87-86-5	Pentachlorophenol	ND	1200	190	ug/kg	
108-95-2	Phenol	ND	240	39	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	240	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	240	30	ug/kg	
83-32-9	Acenaphthene	ND	240	28	ug/kg	
208-96-8	Acenaphthylene	ND	240	27	ug/kg	
62-53-3	Aniline	ND	240	75	ug/kg	
120-12-7	Anthracene	ND	240	24	ug/kg	
92-87-5	Benzidine	ND	2400	550	ug/kg	
56-55-3	Benzo(a)anthracene	33.4	240	24	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	240	24	ug/kg	
205-99-2	Benzo(b)fluoranthene	25.2	240	24	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	240	24	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	240	28	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	240	30	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	240	47	ug/kg	
100-51-6	Benzyl Alcohol	ND	240	47	ug/kg	
91-58-7	2-Chloronaphthalene	ND	240	31	ug/kg	
106-47-8	4-Chloroaniline	ND	240	36	ug/kg	
86-74-8	Carbazole	ND	240	26	ug/kg	
218-01-9	Chrysene	31.5	240	24	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70B-28		
Lab Sample ID:	FA3526-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	70.1
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	240	33	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	240	32	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	240	27	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	240	25	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	240	24	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	240	26	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	240	31	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	240	25	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	240	24	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	240	29	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	240	39	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	240	24	ug/kg	
132-64-9	Dibenzofuran	ND	240	24	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	470	47	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	240	47	ug/kg	
84-66-2	Diethyl phthalate	ND	470	47	ug/kg	
131-11-3	Dimethyl phthalate	ND	240	47	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	470	47	ug/kg	
206-44-0	Fluoranthene	71.0	240	24	ug/kg	J
86-73-7	Fluorene	ND	240	26	ug/kg	
118-74-1	Hexachlorobenzene	ND	240	24	ug/kg	
87-68-3	Hexachlorobutadiene	ND	240	26	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	240	33	ug/kg	
67-72-1	Hexachloroethane	ND	240	27	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	240	24	ug/kg	
78-59-1	Isophorone	ND	240	26	ug/kg	
90-12-0	1-Methylnaphthalene	ND	240	32	ug/kg	
91-57-6	2-Methylnaphthalene	ND	240	27	ug/kg	
88-74-4	2-Nitroaniline	ND	240	35	ug/kg	
99-09-2	3-Nitroaniline	ND	240	33	ug/kg	
100-01-6	4-Nitroaniline	ND	240	50	ug/kg	
91-20-3	Naphthalene	ND	240	24	ug/kg	
98-95-3	Nitrobenzene	ND	240	34	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	470	34	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	240	26	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	240	47	ug/kg	
85-01-8	Phenanthrene	ND	240	24	ug/kg	
129-00-0	Pyrene	62.5	240	24	ug/kg	J
110-86-1	Pyridine	ND	470	54	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	240	25	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70B-28		
Lab Sample ID:	FA3526-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	70.1
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	63%		40-102%
4165-62-2	Phenol-d5	63%		41-100%
118-79-6	2,4,6-Tribromophenol	74%		42-108%
4165-60-0	Nitrobenzene-d5	67%		40-105%
321-60-8	2-Fluorobiphenyl	65%		43-107%
1718-51-0	Terphenyl-d14	87%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70B-28		
Lab Sample ID:	FA3526-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8015C	**Percent Solids:**	70.1
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR076040.D	10	04/17/13	MM	n/a	n/a	GQR3260
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.34 g	5.0 ml	50.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	507	140	70	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	119%		56-149%
98-08-8	aaa-Trifluorotoluene	106%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70B-28		
Lab Sample ID:	FA3526-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	70.1
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY36313.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	10.8	12	4.8	mg/kg	J
	TPH (> C22-C36)	ND	12	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71B-28		
Lab Sample ID:	FA3526-4	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	78.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y8415.D	1	04/10/13	EP	n/a	n/a	VY368
Run #2							

	Initial Weight
Run #1	8.99 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	35	14	ug/kg	
107-02-8	Acrolein	ND	18	6.1	ug/kg	
107-13-1	Acrylonitrile	ND	18	7.1	ug/kg	
71-43-2	Benzene	ND	3.5	0.71	ug/kg	
108-86-1	Bromobenzene	ND	3.5	0.77	ug/kg	
74-97-5	Bromochloromethane	ND	3.5	0.99	ug/kg	
75-27-4	Bromodichloromethane	ND	3.5	1.0	ug/kg	
75-25-2	Bromoform	ND	3.5	0.71	ug/kg	
104-51-8	n-Butylbenzene	ND	3.5	0.91	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.5	0.86	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.5	0.84	ug/kg	
108-90-7	Chlorobenzene	ND	3.5	0.71	ug/kg	
75-00-3	Chloroethane	ND	3.5	1.4	ug/kg	
67-66-3	Chloroform	ND	3.5	0.71	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.5	0.71	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.5	0.81	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	18	7.1	ug/kg	
75-15-0	Carbon disulfide	2.1	3.5	1.4	ug/kg	J
56-23-5	Carbon tetrachloride	ND	3.5	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.5	0.71	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.5	0.86	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.5	0.71	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.5	1.8	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.5	0.71	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.5	0.85	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.5	0.71	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.5	0.71	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.5	0.71	ug/kg	
124-48-1	Dibromochloromethane	ND	3.5	0.71	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.5	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.5	0.71	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.5	0.71	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71B-28		
Lab Sample ID:	FA3526-4	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	78.5
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	3.5	0.71	ug/kg	
95-50-1	o-Dichlorobenzene	ND	3.5	0.77	ug/kg	
106-46-7	p-Dichlorobenzene	ND	3.5	0.93	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.5	0.71	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.5	0.71	ug/kg	
100-41-4	Ethylbenzene	ND	3.5	0.78	ug/kg	
591-78-6	2-Hexanone	ND	18	3.5	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.5	1.4	ug/kg	
110-54-3	Hexane	ND	3.5	1.6	ug/kg	
98-82-8	Isopropylbenzene	ND	3.5	0.94	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.5	0.93	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	18	3.5	ug/kg	
74-83-9	Methyl bromide	ND	3.5	1.4	ug/kg	
74-87-3	Methyl chloride	ND	3.5	1.5	ug/kg	
74-95-3	Methylene bromide	ND	3.5	0.74	ug/kg	
75-09-2	Methylene chloride	ND	7.1	3.2	ug/kg	
78-93-3	Methyl ethyl ketone	ND	18	3.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.5	0.71	ug/kg	
91-20-3	Naphthalene	ND	3.5	1.4	ug/kg	
103-65-1	n-Propylbenzene	ND	3.5	0.73	ug/kg	
100-42-5	Styrene	ND	3.5	0.71	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.5	0.76	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.5	0.71	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.5	0.71	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.5	0.71	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.5	0.74	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.5	1.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.5	0.84	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.5	0.77	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.5	0.74	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.5	0.81	ug/kg	
108-88-3	Toluene	ND	3.5	0.71	ug/kg	
79-01-6	Trichloroethylene	ND	3.5	0.71	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.5	1.4	ug/kg	
75-01-4	Vinyl chloride	ND	3.5	0.71	ug/kg	
108-05-4	Vinyl Acetate	ND	18	2.9	ug/kg	
	m,p-Xylene	ND	7.1	1.5	ug/kg	
95-47-6	o-Xylene	ND	3.5	0.71	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71B-28		
Lab Sample ID:	FA3526-4	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	78.5
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		75-124%
2037-26-5	Toluene-D8	102%		75-126%
460-00-4	4-Bromofluorobenzene	100%		71-133%
17060-07-0	1,2-Dichloroethane-D4	108%		72-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71B-28		
Lab Sample ID:	FA3526-4	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	78.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X027936.D	1	04/15/13	FS	04/12/13	OP46416	SX1342
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1100	210	ug/kg	
95-57-8	2-Chlorophenol	ND	210	25	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	24	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	31	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	210	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	420	84	ug/kg	
95-48-7	2-Methylphenol	ND	210	26	ug/kg	
	3&4-Methylphenol	ND	210	44	ug/kg	
88-75-5	2-Nitrophenol	ND	210	32	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	170	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	170	ug/kg	
108-95-2	Phenol	ND	210	34	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	27	ug/kg	
83-32-9	Acenaphthene	ND	210	25	ug/kg	
208-96-8	Acenaphthylene	ND	210	24	ug/kg	
62-53-3	Aniline	ND	210	67	ug/kg	
120-12-7	Anthracene	ND	210	21	ug/kg	
92-87-5	Benzidine	ND	2100	490	ug/kg	
56-55-3	Benzo(a)anthracene	ND	210	21	ug/kg	
50-32-8	Benzo(a)pyrene	ND	210	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	210	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	210	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	210	25	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	210	27	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	210	42	ug/kg	
100-51-6	Benzyl Alcohol	ND	210	42	ug/kg	
91-58-7	2-Chloronaphthalene	ND	210	27	ug/kg	
106-47-8	4-Chloroaniline	ND	210	32	ug/kg	
86-74-8	Carbazole	ND	210	23	ug/kg	
218-01-9	Chrysene	ND	210	21	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71B-28		
Lab Sample ID:	FA3526-4	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	78.5
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	210	30	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	24	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	21	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	22	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	22	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	25	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	210	35	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	210	21	ug/kg	
132-64-9	Dibenzofuran	ND	210	21	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	420	42	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	210	42	ug/kg	
84-66-2	Diethyl phthalate	ND	420	42	ug/kg	
131-11-3	Dimethyl phthalate	ND	210	42	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	420	42	ug/kg	
206-44-0	Fluoranthene	ND	210	21	ug/kg	
86-73-7	Fluorene	ND	210	23	ug/kg	
118-74-1	Hexachlorobenzene	ND	210	21	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	23	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	29	ug/kg	
67-72-1	Hexachloroethane	ND	210	24	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	210	21	ug/kg	
78-59-1	Isophorone	ND	210	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	210	29	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	24	ug/kg	
88-74-4	2-Nitroaniline	ND	210	31	ug/kg	
99-09-2	3-Nitroaniline	ND	210	30	ug/kg	
100-01-6	4-Nitroaniline	ND	210	45	ug/kg	
91-20-3	Naphthalene	ND	210	21	ug/kg	
98-95-3	Nitrobenzene	ND	210	31	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	420	30	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	23	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	42	ug/kg	
85-01-8	Phenanthrene	ND	210	21	ug/kg	
129-00-0	Pyrene	ND	210	21	ug/kg	
110-86-1	Pyridine	ND	420	48	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	23	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71B-28		
Lab Sample ID:	FA3526-4	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	78.5
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		40-102%
4165-62-2	Phenol-d5	55%		41-100%
118-79-6	2,4,6-Tribromophenol	54%		42-108%
4165-60-0	Nitrobenzene-d5	52%		40-105%
321-60-8	2-Fluorobiphenyl	49%		43-107%
1718-51-0	Terphenyl-d14	64%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71B-28		
Lab Sample ID:	FA3526-4	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8015C	**Percent Solids:**	78.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UU002604.D	1	04/16/13	MM	n/a	n/a	GUU138
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.09 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		56-149%
98-08-8	aaa-Trifluorotoluene	84%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71B-28		
Lab Sample ID:	FA3526-4	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/10/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	78.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY36314.D	1	04/19/13	SJL	04/12/13	OP46431	GYY1330
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	10	4.2	mg/kg	
	TPH (> C22-C36)	ND	10	4.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3526-5	**Date Sampled:**	04/08/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y8417.D	1	04/10/13	EP	n/a	n/a	VY368
Run #2							

	Initial Weight
Run #1	5.00 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3526-5	**Date Sampled:**	04/08/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3526-5	**Date Sampled:**	04/08/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/10/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-121%
2037-26-5	Toluene-D8	103%		71-130%
460-00-4	4-Bromofluorobenzene	98%		59-148%
17060-07-0	1,2-Dichloroethane-D4	103%		77-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENT INFRASTRUCTURE

FA3526

Page: 1 of 1

Project No: 9100133

COC Number(1): 04092013-01

LIMS Number:

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base

Project/Site Name: SS-61 VCM Performance Monitoring (Soil - Semiannual # 2)

Client Name: USACE - Omaha District

Collected by: Dustin McNeil

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (3)	Sample Number (2)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO							Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1	SS61-SB68B-27	SS61-SB68	4/8/2013	1615	26-27	N	1	SO	5	X	X	X	X										1
2	SS61-SB69B-30	SS61-SB69	4/8/2013	1830	29-30	N	1	SO	5	X	X	X	X										1
3	SS61-SB70B-28	SS61-SB70	4/9/2013	1010	27-28	N	1	SO	5	X	X	X	X										1
4	SS61-SB71B-28	SS61-SB71	4/9/2013	1215	27-28	N	1	SO	5	X	X	X	X										1
5	Trip Blank					TB	1	SQ	3	X													1
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

Sample Analysis Requested (5)

Quality Assurance Samples (6)

COMMENTS:

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	4/9/13	1400	1. [signature]		
2. [signature]	04-10-13	930	2. [signature] ACOE	4-10-13	930
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:

Shipped No.:

Method of Shipment: Fed Ex

Airbill Number: 7994 7668 8093

Analytical Lab: Accutest Labs

Delivery Location: Orlando, FL

Lab Recipient:

Delivery Date/Time:

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

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

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

2. 8

5.1 5

FA3526: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA3526 CLIENT: B-Hate PROJECT: SS-161

DATE/TIME RECEIVED: 041013 9:30 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7994 7668 8093

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [x] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM____ 5-GRAM____

NUMBER OF 5035 FIELD KITS ? 4 1/B 1

NUMBER OF LAB FILTERED METALS ? ____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.4
- [ ] CORRECTED TEMPS: 2.8

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE RWC 041013 REVIEWER SIGNATURE/DATE 04/10/13

NF 12/10

receipt confirmation 122910.xls

5.1

5

FA3526: Chain of Custody

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Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY368-MB	Y8401.D	1	04/10/13	EP	n/a	n/a	VY368

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3526-1, FA3526-2, FA3526-3, FA3526-4, FA3526-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY368-MB	Y8401.D	1	04/10/13	EP	n/a	n/a	VY368

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3526-1, FA3526-2, FA3526-3, FA3526-4, FA3526-5

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY368-MB	Y8401.D	1	04/10/13	EP	n/a	n/a	VY368

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3526-1, FA3526-2, FA3526-3, FA3526-4, FA3526-5

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	80-121%
2037-26-5	Toluene-D8	103%	71-130%
460-00-4	4-Bromofluorobenzene	99%	59-148%
17060-07-0	1,2-Dichloroethane-D4	101%	77-123%

Blank Spike Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY368-BS	Y8400.D	1	04/10/13	EP	n/a	n/a	VY368

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3526-1, FA3526-2, FA3526-3, FA3526-4, FA3526-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	300	120	61-144
107-02-8	Acrolein	250	219	88	27-156
107-13-1	Acrylonitrile	250	261	104	55-144
71-43-2	Benzene	50	50.0	100	78-130
108-86-1	Bromobenzene	50	49.9	100	78-123
74-97-5	Bromochloromethane	50	48.9	98	72-122
75-27-4	Bromodichloromethane	50	52.2	104	73-122
75-25-2	Bromoform	50	51.0	102	70-139
104-51-8	n-Butylbenzene	50	46.6	93	80-138
135-98-8	sec-Butylbenzene	50	50.3	101	82-132
98-06-6	tert-Butylbenzene	50	51.9	104	79-130
108-90-7	Chlorobenzene	50	50.8	102	83-122
75-00-3	Chloroethane	50	40.5	81	61-153
67-66-3	Chloroform	50	48.8	98	79-129
95-49-8	o-Chlorotoluene	50	51.1	102	77-123
106-43-4	p-Chlorotoluene	50	53.6	107	78-129
110-75-8	2-Chloroethyl vinyl ether	250	259	104	52-142
75-15-0	Carbon disulfide	50	43.1	86	61-142
56-23-5	Carbon tetrachloride	50	49.6	99	79-135
75-34-3	1,1-Dichloroethane	50	49.3	99	77-132
75-35-4	1,1-Dichloroethylene	50	48.5	97	66-132
563-58-6	1,1-Dichloropropene	50	52.1	104	81-133
96-12-8	1,2-Dibromo-3-chloropropane	50	52.6	105	67-129
106-93-4	1,2-Dibromoethane	50	52.0	104	77-126
107-06-2	1,2-Dichloroethane	50	51.2	102	78-129
78-87-5	1,2-Dichloropropane	50	51.7	103	74-127
142-28-9	1,3-Dichloropropane	50	51.5	103	78-118
594-20-7	2,2-Dichloropropane	50	50.2	100	80-137
124-48-1	Dibromochloromethane	50	50.9	102	78-117
75-71-8	Dichlorodifluoromethane	50	42.6	85	35-162
156-59-2	cis-1,2-Dichloroethylene	50	50.3	101	74-123
10061-01-5	cis-1,3-Dichloropropene	50	47.9	96	79-130
541-73-1	m-Dichlorobenzene	50	51.5	103	82-126
95-50-1	o-Dichlorobenzene	50	50.2	100	83-123
106-46-7	p-Dichlorobenzene	50	46.6	93	84-124
156-60-5	trans-1,2-Dichloroethylene	50	49.3	99	77-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY368-BS	Y8400.D	1	04/10/13	EP	n/a	n/a	VY368

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3526-1, FA3526-2, FA3526-3, FA3526-4, FA3526-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	51.8	104	87-131
100-41-4	Ethylbenzene	50	47.8	96	82-124
591-78-6	2-Hexanone	250	280	112	67-130
87-68-3	Hexachlorobutadiene	50	47.4	95	77-150
110-54-3	Hexane	50	43.8	88	65-147
98-82-8	Isopropylbenzene	50	50.9	102	82-133
99-87-6	p-Isopropyltoluene	50	50.0	100	82-132
108-10-1	4-Methyl-2-pentanone	250	274	110	69-125
74-83-9	Methyl bromide	50	47.4	95	60-146
74-87-3	Methyl chloride	50	46.6	93	58-163
74-95-3	Methylene bromide	50	51.7	103	75-128
75-09-2	Methylene chloride	50	46.5	93	62-140
78-93-3	Methyl ethyl ketone	250	289	116	66-134
1634-04-4	Methyl Tert Butyl Ether	50	47.5	95	70-131
91-20-3	Naphthalene	50	48.2	96	59-143
103-65-1	n-Propylbenzene	50	51.5	103	78-129
100-42-5	Styrene	50	49.9	100	79-123
630-20-6	1,1,1,2-Tetrachloroethane	50	50.2	100	81-121
71-55-6	1,1,1-Trichloroethane	50	50.2	100	80-133
79-34-5	1,1,2,2-Tetrachloroethane	50	51.6	103	70-128
79-00-5	1,1,2-Trichloroethane	50	51.2	102	76-118
87-61-6	1,2,3-Trichlorobenzene	50	48.2	96	78-136
96-18-4	1,2,3-Trichloropropane	50	54.5	109	74-125
120-82-1	1,2,4-Trichlorobenzene	50	45.0	90	82-137
95-63-6	1,2,4-Trimethylbenzene	50	46.4	93	77-129
108-67-8	1,3,5-Trimethylbenzene	50	46.9	94	79-129
127-18-4	Tetrachloroethylene	50	47.8	96	79-132
108-88-3	Toluene	50	48.8	98	80-123
79-01-6	Trichloroethylene	50	48.3	97	78-132
75-69-4	Trichlorofluoromethane	50	48.3	97	67-149
75-01-4	Vinyl chloride	50	48.0	96	60-145
108-05-4	Vinyl Acetate	250	281	112	25-164
	m,p-Xylene	100	97.8	98	82-128
95-47-6	o-Xylene	50	51.9	104	82-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY368-BS	Y8400.D	1	04/10/13	EP	n/a	n/a	VY368

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3526-1, FA3526-2, FA3526-3, FA3526-4, FA3526-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	80-121%
2037-26-5	Toluene-D8	102%	71-130%
460-00-4	4-Bromofluorobenzene	101%	59-148%
17060-07-0	1,2-Dichloroethane-D4	101%	77-123%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3509-2MS	Y8419.D	1	04/10/13	EP	n/a	n/a	VY368
FA3509-2MSD	Y8420.D	1	04/10/13	EP	n/a	n/a	VY368
FA3509-2	Y8403.D	1	04/10/13	EP	n/a	n/a	VY368

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3526-1, FA3526-2, FA3526-3, FA3526-4, FA3526-5

CAS No.	Compound	FA3509-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	37	U	342	362	106	332	97	9	61-144/29
107-02-8	Acrolein	19	U	342	280	82	244	71	14	27-156/39
107-13-1	Acrylonitrile	19	U	342	341	100	315	92	8	55-144/24
71-43-2	Benzene	3.7	U	68.3	66.0	97	62.4	91	6	78-130/25
108-86-1	Bromobenzene	3.7	U	68.3	62.4	91	58.9	86	6	78-123/30
74-97-5	Bromochloromethane	3.7	U	68.3	60.9	89	61.1	89	0	72-122/23
75-27-4	Bromodichloromethane	3.7	U	68.3	64.0	94	60.8	89	5	73-122/25
75-25-2	Bromoform	3.7	U	68.3	61.5	90	60.2	88	2	70-139/26
104-51-8	n-Butylbenzene	3.7	U	68.3	51.9	76*	45.9	67*	12	80-138/31
135-98-8	sec-Butylbenzene	3.7	U	68.3	62.8	92	57.1	84	10	82-132/29
98-06-6	tert-Butylbenzene	3.7	U	68.3	70.9	104	64.7	95	9	79-130/29
108-90-7	Chlorobenzene	3.7	U	68.3	62.0	91	61.3	90	1	83-122/23
75-00-3	Chloroethane	3.7	U	68.3	59.2	87	58.7	86	1	61-153/31
67-66-3	Chloroform	3.7	U	68.3	63.8	93	60.4	88	5	79-129/27
95-49-8	o-Chlorotoluene	3.7	U	68.3	65.3	96	60.3	88	8	77-123/31
106-43-4	p-Chlorotoluene	3.7	U	68.3	65.8	96	62.6	92	5	78-129/29
110-75-8	2-Chloroethyl vinyl ether	19	U	342	310	91	296	87	5	52-142/25
75-15-0	Carbon disulfide	3.7	U	68.3	55.1	81	53.2	78	4	61-142/27
56-23-5	Carbon tetrachloride	3.7	U	68.3	64.1	94	61.5	90	4	79-135/29
75-34-3	1,1-Dichloroethane	3.7	U	68.3	68.1	100	63.9	94	6	77-132/26
75-35-4	1,1-Dichloroethylene	3.7	U	68.3	69.3	101	65.4	96	6	66-132/27
563-58-6	1,1-Dichloropropene	3.7	U	68.3	68.6	100	63.6	93	8	81-133/26
96-12-8	1,2-Dibromo-3-chloropropane	3.7	U	68.3	69.2	101	63.4	93	9	67-129/29
106-93-4	1,2-Dibromoethane	3.7	U	68.3	67.3	99	66.6	98	1	77-126/24
107-06-2	1,2-Dichloroethane	3.7	U	68.3	67.2	98	60.8	89	10	78-129/24
78-87-5	1,2-Dichloropropane	3.7	U	68.3	67.7	99	63.0	92	7	74-127/27
142-28-9	1,3-Dichloropropane	3.7	U	68.3	68.2	100	66.4	97	3	78-118/26
594-20-7	2,2-Dichloropropane	3.7	U	68.3	63.8	93	58.9	86	8	80-137/28
124-48-1	Dibromochloromethane	3.7	U	68.3	65.4	96	63.1	92	4	78-117/27
75-71-8	Dichlorodifluoromethane	3.7	U	68.3	56.0	82	53.4	78	5	35-162/30
156-59-2	cis-1,2-Dichloroethylene	3.7	U	68.3	66.4	97	63.8	93	4	74-123/26
10061-01-5	cis-1,3-Dichloropropene	3.7	U	68.3	62.1	91	58.9	86	5	79-130/23
541-73-1	m-Dichlorobenzene	3.7	U	68.3	56.9	83	53.4	78*	6	82-126/29
95-50-1	o-Dichlorobenzene	3.7	U	68.3	54.5	80*	51.4	75*	6	83-123/28
106-46-7	p-Dichlorobenzene	3.7	U	68.3	52.3	77*	50.6	74*	3	84-124/28
156-60-5	trans-1,2-Dichloroethylene	3.7	U	68.3	64.5	94	63.1	92	2	77-129/27

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3509-2MS	Y8419.D	1	04/10/13	EP	n/a	n/a	VY368
FA3509-2MSD	Y8420.D	1	04/10/13	EP	n/a	n/a	VY368
FA3509-2	Y8403.D	1	04/10/13	EP	n/a	n/a	VY368

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3526-1, FA3526-2, FA3526-3, FA3526-4, FA3526-5

CAS No.	Compound	FA3509-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	3.7 U		68.3	65.5	96	64.0	94	2	87-131/27
100-41-4	Ethylbenzene	3.7 U		68.3	62.5	92	60.4	88	3	82-124/25
591-78-6	2-Hexanone	19 U		342	366	107	348	102	5	67-130/29
87-68-3	Hexachlorobutadiene	3.7 U		68.3	41.2	60*	36.4	53*	12	77-150/36
110-54-3	Hexane	3.7 U		68.3	54.7	80	51.5	75	6	65-147/27
98-82-8	Isopropylbenzene	3.7 U		68.3	62.7	92	60.0	88	4	82-133/27
99-87-6	p-Isopropyltoluene	3.7 U		68.3	60.9	89	55.8	82	9	82-132/29
108-10-1	4-Methyl-2-pentanone	19 U		342	369	108	349	102	6	69-125/24
74-83-9	Methyl bromide	3.7 U		68.3	64.8	95	62.1	91	4	60-146/31
74-87-3	Methyl chloride	3.7 U		68.3	63.0	92	61.0	89	3	58-163/26
74-95-3	Methylene bromide	3.7 U		68.3	63.4	93	59.7	87	6	75-128/26
75-09-2	Methylene chloride	7.4 U		68.3	68.0	100	63.8	93	6	62-140/25
78-93-3	Methyl ethyl ketone	19 U		342	360	105	338	99	6	66-134/23
1634-04-4	Methyl Tert Butyl Ether	3.7 U		68.3	66.5	97	62.4	91	6	70-131/25
91-20-3	Naphthalene	3.7 U		68.3	36.8	54*	34.7	51*	6	59-143/31
103-65-1	n-Propylbenzene	3.7 U		68.3	66.6	98	61.8	90	7	78-129/29
100-42-5	Styrene	3.7 U		68.3	55.7	82	55.8	82	0	79-123/28
630-20-6	1,1,1,2-Tetrachloroethane	3.7 U		68.3	63.9	94	62.3	91	3	81-121/25
71-55-6	1,1,1-Trichloroethane	3.7 U		68.3	65.4	96	61.6	90	6	80-133/27
79-34-5	1,1,2,2-Tetrachloroethane	3.7 U		68.3	69.1	101	66.3	97	4	70-128/30
79-00-5	1,1,2-Trichloroethane	3.7 U		68.3	67.2	98	66.4	97	1	76-118/28
87-61-6	1,2,3-Trichlorobenzene	3.7 U		68.3	33.6	49*	32.0	47*	5	78-136/34
96-18-4	1,2,3-Trichloropropane	3.7 U		68.3	74.3	109	66.8	98	11	74-125/30
120-82-1	1,2,4-Trichlorobenzene	3.7 U		68.3	33.8	49*	31.9	47*	6	82-137/32
95-63-6	1,2,4-Trimethylbenzene	3.7 U		68.3	60.9	89	57.0	83	7	77-129/29
108-67-8	1,3,5-Trimethylbenzene	3.7 U		68.3	60.7	89	57.2	84	6	79-129/31
127-18-4	Tetrachloroethylene	3.7 U		68.3	58.7	86	56.5	83	4	79-132/27
108-88-3	Toluene	3.7 U		68.3	64.9	95	62.3	91	4	80-123/26
79-01-6	Trichloroethylene	3.7 U		68.3	64.5	94	59.6	87	8	78-132/28
75-69-4	Trichlorofluoromethane	3.7 U		68.3	62.6	92	59.7	87	5	67-149/29
75-01-4	Vinyl chloride	3.7 U		68.3	69.9	102	64.5	94	8	60-145/29
108-05-4	Vinyl Acetate	19 U		342	166	49	157	46	6	25-164/35
	m,p-Xylene	7.4 U		137	126	92	120	88	5	82-128/25
95-47-6	o-Xylene	3.7 U		68.3	64.2	94	62.6	92	3	82-126/25

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3509-2MS	Y8419.D	1	04/10/13	EP	n/a	n/a	VY368
FA3509-2MSD	Y8420.D	1	04/10/13	EP	n/a	n/a	VY368
FA3509-2	Y8403.D	1	04/10/13	EP	n/a	n/a	VY368

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3526-1, FA3526-2, FA3526-3, FA3526-4, FA3526-5

CAS No.	Surrogate Recoveries	MS	MSD	FA3509-2	Limits
1868-53-7	Dibromofluoromethane	104%	98%	100%	80-121%
2037-26-5	Toluene-D8	106%	107%	104%	71-130%
460-00-4	4-Bromofluorobenzene	108%	104%	101%	59-148%
17060-07-0	1,2-Dichloroethane-D4	95%	96%	105%	77-123%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MB	T007333.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	830	170	ug/kg	
95-57-8	2-Chlorophenol	ND	170	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	18	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	19	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	24	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	21	ug/kg	
	3&4-Methylphenol	ND	170	35	ug/kg	
88-75-5	2-Nitrophenol	ND	170	25	ug/kg	
100-02-7	4-Nitrophenol	ND	830	130	ug/kg	
87-86-5	Pentachlorophenol	ND	830	130	ug/kg	
108-95-2	Phenol	ND	170	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	20	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	21	ug/kg	
83-32-9	Acenaphthene	ND	170	20	ug/kg	
208-96-8	Acenaphthylene	ND	170	19	ug/kg	
62-53-3	Aniline	ND	170	53	ug/kg	
120-12-7	Anthracene	ND	170	17	ug/kg	
92-87-5	Benzidine	ND	1700	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	21	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	22	ug/kg	
106-47-8	4-Chloroaniline	ND	170	25	ug/kg	
86-74-8	Carbazole	ND	170	18	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	23	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	17	ug/kg	

Method Blank Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MB	T007333.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	170	17	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	18	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	17	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	17	ug/kg	
132-64-9	Dibenzofuran	ND	170	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate	ND	330	33	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	33	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	33	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	23	ug/kg	
67-72-1	Hexachloroethane	ND	170	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	17	ug/kg	
78-59-1	Isophorone	ND	170	18	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	23	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	25	ug/kg	
99-09-2	3-Nitroaniline	ND	170	23	ug/kg	
100-01-6	4-Nitroaniline	ND	170	36	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
98-95-3	Nitrobenzene	ND	170	24	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	24	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	17	ug/kg	
110-86-1	Pyridine	ND	330	38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	18	ug/kg	

Method Blank Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MB	T007333.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	73%	40-102%
4165-62-2	Phenol-d5	77%	41-100%
118-79-6	2,4,6-Tribromophenol	79%	42-108%
4165-60-0	Nitrobenzene-d5	78%	40-105%
321-60-8	2-Fluorobiphenyl	69%	43-107%
1718-51-0	Terphenyl-d14	90%	45-119%

Blank Spike Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-BS	T007332.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic Acid	3330	2920	88	44-116
95-57-8	2-Chlorophenol	1670	1170	70	54-97
59-50-7	4-Chloro-3-methyl phenol	1670	1440	86	59-102
120-83-2	2,4-Dichlorophenol	1670	1360	82	60-101
105-67-9	2,4-Dimethylphenol	1670	1340	80	49-89
51-28-5	2,4-Dinitrophenol	3330	2540	76	39-107
534-52-1	4,6-Dinitro-o-cresol	3330	2820	85	58-109
95-48-7	2-Methylphenol	1670	1210	73	53-94
	3&4-Methylphenol	3330	2550	77	54-95
88-75-5	2-Nitrophenol	1670	1270	76	55-96
100-02-7	4-Nitrophenol	3330	2600	78	56-106
87-86-5	Pentachlorophenol	3330	2760	83	50-115
108-95-2	Phenol	1670	1230	74	55-99
95-95-4	2,4,5-Trichlorophenol	1670	1280	77	60-101
88-06-2	2,4,6-Trichlorophenol	1670	1260	76	60-100
83-32-9	Acenaphthene	2330	1680	72	59-97
208-96-8	Acenaphthylene	1670	1280	77	58-98
62-53-3	Aniline	1670	1060	64	38-92
120-12-7	Anthracene	2330	1790	77	61-104
56-55-3	Benzo(a)anthracene	2330	1920	82	60-106
50-32-8	Benzo(a)pyrene	2330	1830	78	59-102
205-99-2	Benzo(b)fluoranthene	2330	1980	85	60-107
191-24-2	Benzo(g,h,i)perylene	2330	1850	79	56-103
207-08-9	Benzo(k)fluoranthene	2330	1940	83	61-107
101-55-3	4-Bromophenyl phenyl ether	1670	1370	82	60-104
85-68-7	Butyl benzyl phthalate	1670	1560	94	57-110
100-51-6	Benzyl Alcohol	1670	1240	74	51-102
91-58-7	2-Chloronaphthalene	1670	1220	73	57-95
106-47-8	4-Chloroaniline	1670	1100	66	19-85
86-74-8	Carbazole	1670	1330	80	60-106
218-01-9	Chrysene	2330	1900	81	60-107
111-91-1	bis(2-Chloroethoxy)methane	1670	1300	78	51-89
111-44-4	bis(2-Chloroethyl)ether	1670	1120	67	50-96
108-60-1	bis(2-Chloroisopropyl)ether	1670	969	58	44-94
7005-72-3	4-Chlorophenyl phenyl ether	1670	1270	76	60-101
95-50-1	1,2-Dichlorobenzene	1670	1110	67	47-91

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-BS	T007332.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
122-66-7	1,2-Diphenylhydrazine	1670	1450	87	58-104
541-73-1	1,3-Dichlorobenzene	1670	1070	64	45-86
106-46-7	1,4-Dichlorobenzene	1670	1100	66	45-88
121-14-2	2,4-Dinitrotoluene	1670	1330	80	59-103
606-20-2	2,6-Dinitrotoluene	1670	1330	80	57-99
91-94-1	3,3'-Dichlorobenzidine	1670	1230	74	34-88
53-70-3	Dibenzo(a,h)anthracene	2330	1940	83	57-105
132-64-9	Dibenzofuran	1670	1240	74	58-103
84-74-2	Di-n-butyl phthalate	1670	1400	84	59-105
117-84-0	Di-n-octyl phthalate	1670	1630	98	59-117
84-66-2	Diethyl phthalate	1670	1370	82	59-106
131-11-3	Dimethyl phthalate	1670	1310	79	60-100
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1560	94	57-111
206-44-0	Fluoranthene	1670	1310	79	60-110
86-73-7	Fluorene	2330	1710	73	60-99
118-74-1	Hexachlorobenzene	1670	1410	85	58-103
87-68-3	Hexachlorobutadiene	1670	1240	74	49-95
77-47-4	Hexachlorocyclopentadiene	1670	1120	67	36-94
67-72-1	Hexachloroethane	1670	1120	67	44-89
193-39-5	Indeno(1,2,3-cd)pyrene	2330	1980	85	57-104
78-59-1	Isophorone	1670	1130	68	58-97
90-12-0	1-Methylnaphthalene	1670	1330	80	55-93
91-57-6	2-Methylnaphthalene	1670	1280	77	57-103
88-74-4	2-Nitroaniline	1670	1290	77	53-106
99-09-2	3-Nitroaniline	1670	1040	62	29-85
100-01-6	4-Nitroaniline	1670	1250	75	49-104
91-20-3	Naphthalene	1670	1330	80	54-93
98-95-3	Nitrobenzene	1670	1250	75	53-92
62-75-9	N-Nitrosodimethylamine	1670	1040	62	37-88
621-64-7	N-Nitroso-di-n-propylamine	1670	1250	75	49-94
86-30-6	N-Nitrosodiphenylamine	1670	1380	83	53-107
85-01-8	Phenanthrene	2330	1820	78	61-103
129-00-0	Pyrene	2330	2010	86	58-109
110-86-1	Pyridine	1670	913	55	30-68
120-82-1	1,2,4-Trichlorobenzene	1670	1230	74	52-93

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-BS	T007332.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	68%	40-102%
4165-62-2	Phenol-d5	71%	41-100%
118-79-6	2,4,6-Tribromophenol	81%	42-108%
4165-60-0	Nitrobenzene-d5	72%	40-105%
321-60-8	2-Fluorobiphenyl	68%	43-107%
1718-51-0	Terphenyl-d14	92%	45-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MS [a]	T007341.D	4	04/12/13	FS	04/12/13	OP46416	ST357
OP46416-MSD [a]	T007342.D	4	04/12/13	FS	04/12/13	OP46416	ST357
FA3550-2 [a]	T007340.D	4	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Compound	FA3550-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	3500 U		3510	ND	0*	ND	0*	nc	36-118/41
95-57-8	2-Chlorophenol	700 U		1750	1070	61	984	56	8	48-104/26
59-50-7	4-Chloro-3-methyl phenol	700 U		1750	1250	71	1210	69	3	52-108/21
120-83-2	2,4-Dichlorophenol	700 U		1750	1220	70	1190	68	2	51-105/27
105-67-9	2,4-Dimethylphenol	700 U		1750	1230	70	1200	68	2	43-96/23
51-28-5	2,4-Dinitrophenol	3500 U		3510	ND	0*	ND	0*	nc	40-119/32
534-52-1	4,6-Dinitro-o-cresol	1400 U		3510	ND	0*	ND	0*	nc	64-121/29
95-48-7	2-Methylphenol	700 U		1750	1070	61	970	55	10	46-107/24
	3&4-Methylphenol	700 U		3510	2240	64	2020	57	10	44-111/24
88-75-5	2-Nitrophenol	700 U		1750	1040	59	880	50	17	49-104/27
100-02-7	4-Nitrophenol	3500 U		3510	2050	58	2090	59	2	56-116/23
87-86-5	Pentachlorophenol	3500 U		3510	1710	49*	1850	53*	8	61-114/23
108-95-2	Phenol	700 U		1750	1070	61	977	56	9	45-110/24
95-95-4	2,4,5-Trichlorophenol	700 U		1750	1140	65	1170	66	3	58-112/22
88-06-2	2,4,6-Trichlorophenol	700 U		1750	1110	63	1130	64	2	56-109/25
83-32-9	Acenaphthene	700 U		2460	1550	63	1510	61	3	56-109/23
208-96-8	Acenaphthylene	700 U		1750	1200	68	1180	67	2	56-106/23
62-53-3	Aniline	700 U		1750	954	54	848	48	12	42-108/28
120-12-7	Anthracene	700 U		2460	1640	67	1660	67	1	61-110/21
56-55-3	Benzo(a)anthracene	71.6	I	2460	1650	64*	1710	66	4	66-111/23
50-32-8	Benzo(a)pyrene	75.7	I	2460	1520	59	1590	61	5	59-104/23
205-99-2	Benzo(b)fluoranthene	88.5	I	2460	1850	72	1660	64*	11	67-113/24
191-24-2	Benzo(g,h,i)perylene	149	I	2460	1740	65*	1910	71	9	67-113/21
207-08-9	Benzo(k)fluoranthene	700 U		2460	1450	59*	1570	64*	8	67-114/22
101-55-3	4-Bromophenyl phenyl ether	700 U		1750	1280	73	1280	73	0	62-110/21
85-68-7	Butyl benzyl phthalate	700 U		1750	1260	72	1250	71	1	65-113/20
100-51-6	Benzyl Alcohol	700 U		1750	1150	66	979	56	16	53-108/24
91-58-7	2-Chloronaphthalene	700 U		1750	1120	64	1090	62	3	53-106/23
106-47-8	4-Chloroaniline	700 U		1750	1160	66	1090	62	6	30-115/30
86-74-8	Carbazole	700 U		1750	1160	66	1190	68	3	60-111/19
218-01-9	Chrysene	83.9	I	2460	1620	63*	1670	64*	3	65-112/25
111-91-1	bis(2-Chloroethoxy)methane	700 U		1750	1200	68	1130	64	6	48-105/24
111-44-4	bis(2-Chloroethyl)ether	700 U		1750	1020	58	911	52	11	46-103/27
108-60-1	bis(2-Chloroisopropyl)ether	700 U		1750	975	56	866	49	12	40-110/25
7005-72-3	4-Chlorophenyl phenyl ether	700 U		1750	1150	66	1160	66	1	58-106/21
95-50-1	1,2-Dichlorobenzene	700 U		1750	970	55	862	49	12	44-102/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MS [a]	T007341.D	4	04/12/13	FS	04/12/13	OP46416	ST357
OP46416-MSD [a]	T007342.D	4	04/12/13	FS	04/12/13	OP46416	ST357
FA3550-2 [a]	T007340.D	4	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Compound	FA3550-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
122-66-7	1,2-Diphenylhydrazine	700 U		1750	1220	70	1240	70	2	58-112/22
541-73-1	1,3-Dichlorobenzene	700 U		1750	919	52	834	47	10	42-100/30
106-46-7	1,4-Dichlorobenzene	700 U		1750	955	54	863	49	10	40-106/29
121-14-2	2,4-Dinitrotoluene	700 U		1750	1050	60	963	55*	9	59-109/20
606-20-2	2,6-Dinitrotoluene	700 U		1750	1140	65	1070	61	6	61-107/22
91-94-1	3,3'-Dichlorobenzidine	700 U		1750	850	48	1090	62	25	36-114/28
53-70-3	Dibenzo(a,h)anthracene	700 U		2460	1690	69	1770	72	5	68-115/23
132-64-9	Dibenzofuran	700 U		1750	1150	66	1110	63	4	57-108/22
84-74-2	Di-n-butyl phthalate	1400 U		1750	1250	71	1280	73	2	63-108/19
117-84-0	Di-n-octyl phthalate	700 U		1750	1270	72	1200	68	6	64-119/21
84-66-2	Diethyl phthalate	1400 U		1750	1250	71	1230	70	2	61-109/20
131-11-3	Dimethyl phthalate	700 U		1750	1250	71	1210	69	3	59-108/20
117-81-7	bis(2-Ethylhexyl)phthalate	1400 U		1750	1280	73	1270	72	1	64-115/23
206-44-0	Fluoranthene	72.7	I	1750	1170	63	1180	63	1	60-108/25
86-73-7	Fluorene	700 U		2460	1550	63	1510	61	3	58-109/21
118-74-1	Hexachlorobenzene	700 U		1750	1110	63	1170	66	5	59-111/21
87-68-3	Hexachlorobutadiene	700 U		1750	1180	67	1110	63	6	41-108/27
77-47-4	Hexachlorocyclopentadiene	700 U		1750	405	23*	335	19*	19	49-110/31
67-72-1	Hexachloroethane	700 U		1750	899	51	800	45	12	40-105/32
193-39-5	Indeno(1,2,3-cd)pyrene	76.2	I	2460	1840	72	1990	78	8	66-116/22
78-59-1	Isophorone	700 U		1750	1030	59	978	56	5	42-89/22
90-12-0	1-Methylnaphthalene	700 U		1750	1280	73	1190	68	7	49-106/26
91-57-6	2-Methylnaphthalene	700 U		1750	1290	74	1150	65	11	47-106/27
88-74-4	2-Nitroaniline	700 U		1750	1240	71	1150	65	8	56-123/24
99-09-2	3-Nitroaniline	700 U		1750	1130	64	1170	66	3	41-111/25
100-01-6	4-Nitroaniline	700 U		1750	1030	59	1040	59	1	54-113/22
91-20-3	Naphthalene	700 U		1750	1270	72	1170	66	8	44-104/27
98-95-3	Nitrobenzene	700 U		1750	1180	67	1080	61	9	43-108/25
62-75-9	N-Nitrosodimethylamine	1400 U		1750	919	52	814	46	12	40-106/27
621-64-7	N-Nitroso-di-n-propylamine	700 U		1750	1090	62	959	54	13	48-108/27
86-30-6	N-Nitrosodiphenylamine	700 U		1750	1270	72	1300	74	2	62-110/21
85-01-8	Phenanthrene	700 U		2460	1630	66	1640	67	1	63-111/22
129-00-0	Pyrene	118	I	2460	1620	61*	1650	62*	2	65-115/25
110-86-1	Pyridine	1400 U		1750	691	39	687	39	1	31-102/38
120-82-1	1,2,4-Trichlorobenzene	700 U		1750	1150	66	1080	61	6	45-100/26

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MS [a]	T007341.D	4	04/12/13	FS	04/12/13	OP46416	ST357
OP46416-MSD [a]	T007342.D	4	04/12/13	FS	04/12/13	OP46416	ST357
FA3550-2 [a]	T007340.D	4	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Surrogate Recoveries	MS	MSD	FA3550-2	Limits
367-12-4	2-Fluorophenol	59%	53%	57%	40-102%
4165-62-2	Phenol-d5	62%	54%	59%	41-100%
118-79-6	2,4,6-Tribromophenol	63%	64%	65%	42-108%
4165-60-0	Nitrobenzene-d5	64%	57%	61%	40-105%
321-60-8	2-Fluorobiphenyl	63%	60%	62%	43-107%
1718-51-0	Terphenyl-d14	64%	65%	73%	45-119%

(a) Dilution required due to matrix interference; extract was viscous.

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUU138-MB	UU002585.D	1	04/16/13	MM	n/a	n/a	GUU138

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3526-1, FA3526-2, FA3526-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	87%	56-149%
98-08-8	aaa-Trifluorotoluene	102%	66-132%

Method Blank Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR3260-MB	QR076028.D	1	04/17/13	MM	n/a	n/a	GQR3260

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3526-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	99%	56-149%
98-08-8	aaa-Trifluorotoluene	96%	66-132%

Blank Spike Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GUU138-BS	UU002584.D	1	04/16/13	MM	n/a	n/a	GUU138

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3526-1, FA3526-2, FA3526-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	21.9	110	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	103%	56-149%
98-08-8	aaa-Trifluorotoluene	116%	66-132%

8.2.1

8

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR3260-BS	QR076027.D	1	04/17/13	MM	n/a	n/a	GQR3260

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3526-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	19.1	96	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	109%	56-149%
98-08-8	aaa-Trifluorotoluene	97%	66-132%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3448-8MS	UU002588.D	1	04/16/13	MM	n/a	n/a	GUU138
FA3448-8MSD	UU002589.D	1	04/16/13	MM	n/a	n/a	GUU138
FA3448-8	UU002587.D	1	04/16/13	MM	n/a	n/a	GUU138

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3526-1, FA3526-2, FA3526-4

CAS No.	Compound	FA3448-8 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		22.9	25.0	109	25.8	112	3	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA3448-8	Limits
460-00-4	4-Bromofluorobenzene	102%	104%	93%	56-149%
98-08-8	aaa-Trifluorotoluene	103%	106%	105%	66-132%

8.3.1

8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3561-4MS	QR076035.D	1	04/17/13	MM	n/a	n/a	GQR3260
FA3561-4MSD	QR076036.D	1	04/17/13	MM	n/a	n/a	GQR3260
FA3561-4	QR076034.D	1	04/17/13	MM	n/a	n/a	GQR3260

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3526-3

CAS No.	Compound	FA3561-4 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	33.1		24.9	53.9	83	54.7	87	1	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA3561-4	Limits
460-00-4	4-Bromofluorobenzene	122%	125%	124%	56-149%
98-08-8	aaa-Trifluorotoluene	112%	113%	121%	66-132%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46431-MB	YY36297.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	8.3	3.3	mg/kg	
	TPH (> C22-C36)	ND	8.3	3.3	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	82%	56-122%

9.1.1

9

Blank Spike Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46431-BS	YY36296.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C22)	33.3	28.5	86	65-116
	TPH (> C22-C36)	33.3	35.7	107	51-148

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	87%	56-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3526
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46431-MS	YY36309.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330
OP46431-MSD	YY36310.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330
FA3526-2	YY36308.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3526-1, FA3526-2, FA3526-3, FA3526-4

CAS No.	Compound	FA3526-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	ND		40	22.4	56*	28.8	72	25	65-116/28
	TPH (> C22-C36)	ND		40	25.6	64	37.0	93	36*	51-148/28

CAS No.	Surrogate Recoveries	MS	MSD	FA3526-2	Limits
84-15-1	o-Terphenyl	53%*	73%	72%	56-122%

9.3.1

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

06/26/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA3561

Sampling Dates: 04/09/13 - 04/10/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **94**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

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Accutest LabLink@143056 11:17 26-Jun-2013

Sample Summary

Bhate Environmental

Job No: FA3561

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA3561-1	04/09/13	14:40	DM	04/11/13	SO	Soil	SS61-SB72B-29
FA3561-2	04/09/13	14:40	DM	04/11/13	SO	Soil	SS61-SB72B-29A
FA3561-3	04/09/13	16:35	DM	04/11/13	SO	Soil	SS61-SB73B-27
FA3561-4	04/10/13	09:00	DM	04/11/13	SO	Soil	SS61-SB74B-28
FA3561-5	04/10/13	11:00	DM	04/11/13	SO	Soil	SS61-SB76B-30
FA3561-6	04/09/13	00:00	DM	04/11/13	SO	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA3561

Site: Holloman AFB; SS61 VCM **Report Date** 4/24/2013 9:10:38 AM

5 Samples and 1 Trip Blank were collected between 04/09/2013 and 04/10/2013 and were received at Accutest SE on 04/11/2013 properly preserved, at 2 Deg. C and intact. These Samples received an Accutest job number of FA3561. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO **Batch ID:** VG3170

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3549-1MS, FA3549-1MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for Naphthalene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP46416

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3550-2MS, FA3550-2MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Benzo(a)anthracene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic Acid, Chrysene, Hexachlorocyclopentadiene, Pentachlorophenol, Pyrene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 4,6-Dinitro-o-cresol, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzoic Acid, Chrysene, Hexachlorocyclopentadiene, Pentachlorophenol, Pyrene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

OP46416-MS: Dilution required due to matrix interference; extract was viscous.

OP46416-MSD: Dilution required due to matrix interference; extract was viscous.

Matrix: SO **Batch ID:** OP46429

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3123-2RMS, FA3123-2RMSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 4-Chloro-3-methyl phenol are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Volatiles by GC By Method SW846 8015C

Matrix: SO **Batch ID:** GQR3259

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3604-4MS, FA3604-4MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** GQR3260

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3561-4MS, FA3561-4MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: SO **Batch ID:** OP46431

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3526-2MS, FA3526-2MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for TPH (C10-C22) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for TPH (>C22-C36) are outside control limits for sample OP46431-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) OP46431-MS has surrogates outside control limits. Probable cause is due to matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN55352

Sample(s) FA3720-1DUP was used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: April 24, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA3561
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/09/13 thru 04/10/13

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA3561-1	**SS61-SB72B-29**					
sec-Butylbenzene		1270	310	74	ug/kg	SW846 8260B
tert-Butylbenzene		512	310	73	ug/kg	SW846 8260B
Ethylbenzene		4590	310	68	ug/kg	SW846 8260B
Isopropylbenzene		39400	3100	810	ug/kg	SW846 8260B
n-Propylbenzene		2390	310	63	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene		2070	310	66	ug/kg	SW846 8260B
m,p-Xylene		2680	620	130	ug/kg	SW846 8260B
Benzo(a)anthracene		24.4 J	230	23	ug/kg	SW846 8270D
Fluoranthene		38.3 J	230	23	ug/kg	SW846 8270D
Pyrene		33.7 J	230	23	ug/kg	SW846 8270D
TPH-GRO (C6-C10)		458	310	150	mg/kg	SW846 8015C
TPH (C10-C22)		6.01 J	12	4.7	mg/kg	SW846 8015C
FA3561-2	**SS61-SB72B-29A**					
sec-Butylbenzene		1220	340	83	ug/kg	SW846 8260B
tert-Butylbenzene		495	340	81	ug/kg	SW846 8260B
Ethylbenzene		4410	3400	750	ug/kg	SW846 8260B
Isopropylbenzene		46200	3400	900	ug/kg	SW846 8260B
n-Propylbenzene		2260	340	70	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene		1860	340	74	ug/kg	SW846 8260B
m,p-Xylene		2230	680	140	ug/kg	SW846 8260B
Benzo(a)anthracene		42.9 J	230	23	ug/kg	SW846 8270D
Benzo(b)fluoranthene		29.0 J	230	23	ug/kg	SW846 8270D
Chrysene		40.0 J	230	23	ug/kg	SW846 8270D
Fluoranthene		97.3 J	230	23	ug/kg	SW846 8270D
Phenanthrene		52.7 J	230	23	ug/kg	SW846 8270D
Pyrene		67.7 J	230	23	ug/kg	SW846 8270D
TPH-GRO (C6-C10)		447	340	170	mg/kg	SW846 8015C
TPH (C10-C22)		6.12 J	12	4.6	mg/kg	SW846 8015C
TPH (> C22-C36)		6.00 J	12	4.6	mg/kg	SW846 8015C
FA3561-3	**SS61-SB73B-27**					
Benzene		3680	3100	620	ug/kg	SW846 8260B
sec-Butylbenzene		1030	310	75	ug/kg	SW846 8260B
tert-Butylbenzene		406	310	74	ug/kg	SW846 8260B
Ethylbenzene		342	310	69	ug/kg	SW846 8260B
Isopropylbenzene		40800	3100	820	ug/kg	SW846 8260B
n-Propylbenzene		1420	310	64	ug/kg	SW846 8260B
Phenol		131 J	220	36	ug/kg	SW846 8270D
Benzo(a)anthracene		45.0 J	220	22	ug/kg	SW846 8270D
Benzo(b)fluoranthene		27.2 J	220	22	ug/kg	SW846 8270D

Summary of Hits

Job Number: FA3561
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/09/13 thru 04/10/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Chrysene		39.9 J	220	22	ug/kg	SW846 8270D
Fluoranthene		108 J	220	22	ug/kg	SW846 8270D
Phenanthrene		61.4 J	220	22	ug/kg	SW846 8270D
Pyrene		78.1 J	220	22	ug/kg	SW846 8270D
TPH-GRO (C6-C10)		266	67	34	mg/kg	SW846 8015C
TPH (C10-C22)		6.18 J	11	4.4	mg/kg	SW846 8015C
FA3561-4	**SS61-SB74B-28**					
Benzene		5.4	4.1	0.82	ug/kg	SW846 8260B
sec-Butylbenzene		12.3	4.1	1.0	ug/kg	SW846 8260B
tert-Butylbenzene		18.3	4.1	0.98	ug/kg	SW846 8260B
Carbon disulfide		8.8	4.1	1.6	ug/kg	SW846 8260B
Ethylbenzene		27.4	4.1	0.91	ug/kg	SW846 8260B
Isopropylbenzene		388	320	84	ug/kg	SW846 8260B
n-Propylbenzene		14.4	4.1	0.85	ug/kg	SW846 8260B
Toluene		1.7 J	4.1	0.82	ug/kg	SW846 8260B
m,p-Xylene		3.2 J	8.2	1.7	ug/kg	SW846 8260B
TPH-GRO (C6-C10)		33.1	6.2	3.1	mg/kg	SW846 8015C
FA3561-5	**SS61-SB76B-30**					
Acetone		195	39	16	ug/kg	SW846 8260B
sec-Butylbenzene		15.8	3.9	0.95	ug/kg	SW846 8260B
tert-Butylbenzene		26.0	3.9	0.94	ug/kg	SW846 8260B
Carbon disulfide		2.3 J	3.9	1.6	ug/kg	SW846 8260B
Isopropylbenzene		2.2 J	3.9	1.0	ug/kg	SW846 8260B
TPH-GRO (C6-C10)		124	53	26	mg/kg	SW846 8015C
FA3561-6	**TRIP BLANK**					

No hits reported in this sample.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-SB72B-29		
Lab Sample ID:	FA3561-1	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	70.7
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0088176.D	1	04/11/13	EP	n/a	n/a	VG3170
Run #2	G0088182.D	1	04/11/13	EP	n/a	n/a	VG3170

	Initial Weight	Methanol Aliquot
Run #1	8.67 g	100 ul
Run #2	8.67 g	10.0 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	3100	1200	ug/kg	
107-02-8	Acrolein	ND	1500	530	ug/kg	
107-13-1	Acrylonitrile	ND	1500	610	ug/kg	
71-43-2	Benzene	ND	310	62	ug/kg	
108-86-1	Bromobenzene	ND	310	66	ug/kg	
74-97-5	Bromochloromethane	ND	310	86	ug/kg	
75-27-4	Bromodichloromethane	ND	310	87	ug/kg	
75-25-2	Bromoform	ND	310	62	ug/kg	
104-51-8	n-Butylbenzene	ND	310	79	ug/kg	
135-98-8	sec-Butylbenzene	1270	310	74	ug/kg	
98-06-6	tert-Butylbenzene	512	310	73	ug/kg	
108-90-7	Chlorobenzene	ND	310	62	ug/kg	
75-00-3	Chloroethane	ND	310	120	ug/kg	
67-66-3	Chloroform	ND	310	62	ug/kg	
95-49-8	o-Chlorotoluene	ND	310	62	ug/kg	
106-43-4	p-Chlorotoluene	ND	310	71	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	1500	620	ug/kg	
75-15-0	Carbon disulfide	ND	310	120	ug/kg	
56-23-5	Carbon tetrachloride	ND	310	70	ug/kg	
75-34-3	1,1-Dichloroethane	ND	310	62	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	310	75	ug/kg	
563-58-6	1,1-Dichloropropene	ND	310	62	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	310	150	ug/kg	
106-93-4	1,2-Dibromoethane	ND	310	62	ug/kg	
107-06-2	1,2-Dichloroethane	ND	310	74	ug/kg	
78-87-5	1,2-Dichloropropane	ND	310	62	ug/kg	
142-28-9	1,3-Dichloropropane	ND	310	62	ug/kg	
594-20-7	2,2-Dichloropropane	ND	310	62	ug/kg	
124-48-1	Dibromochloromethane	ND	310	62	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	310	62	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	310	62	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	310	62	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29		
Lab Sample ID:	FA3561-1	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	70.7
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	310	62	ug/kg	
95-50-1	o-Dichlorobenzene	ND	310	67	ug/kg	
106-46-7	p-Dichlorobenzene	ND	310	81	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	310	62	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	310	62	ug/kg	
100-41-4	Ethylbenzene	4590	310	68	ug/kg	
591-78-6	2-Hexanone	ND	1500	310	ug/kg	
87-68-3	Hexachlorobutadiene	ND	310	120	ug/kg	
110-54-3	Hexane	ND	310	140	ug/kg	
98-82-8	Isopropylbenzene	39400 [a]	3100	810	ug/kg	
99-87-6	p-Isopropyltoluene	ND	310	81	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1500	310	ug/kg	
74-83-9	Methyl bromide	ND	310	120	ug/kg	
74-87-3	Methyl chloride	ND	310	130	ug/kg	
74-95-3	Methylene bromide	ND	310	64	ug/kg	
75-09-2	Methylene chloride	ND	620	280	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1500	310	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	310	62	ug/kg	
91-20-3	Naphthalene	ND	310	120	ug/kg	
103-65-1	n-Propylbenzene	2390	310	63	ug/kg	
100-42-5	Styrene	ND	310	62	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	310	66	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	310	62	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	310	62	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	310	62	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	310	65	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	310	99	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	310	73	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	2070	310	66	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	310	65	ug/kg	
127-18-4	Tetrachloroethylene	ND	310	71	ug/kg	
108-88-3	Toluene	ND	310	62	ug/kg	
79-01-6	Trichloroethylene	ND	310	62	ug/kg	
75-69-4	Trichlorofluoromethane	ND	310	120	ug/kg	
75-01-4	Vinyl chloride	ND	310	62	ug/kg	
108-05-4	Vinyl Acetate	ND	1500	250	ug/kg	
	m,p-Xylene	2680	620	130	ug/kg	
95-47-6	o-Xylene	ND	310	62	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29		
Lab Sample ID:	FA3561-1	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	70.7
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	91%	75-124%
2037-26-5	Toluene-D8	94%	96%	75-126%
460-00-4	4-Bromofluorobenzene	95%	99%	71-133%
17060-07-0	1,2-Dichloroethane-D4	100%	96%	72-135%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29		
Lab Sample ID:	FA3561-1	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	70.7
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X027935.D	1	04/15/13	FS	04/12/13	OP46416	SX1342
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1200	230	ug/kg	
95-57-8	2-Chlorophenol	ND	230	27	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	230	25	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	230	26	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	230	34	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	230	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	470	93	ug/kg	
95-48-7	2-Methylphenol	ND	230	29	ug/kg	
	3&4-Methylphenol	ND	230	48	ug/kg	
88-75-5	2-Nitrophenol	ND	230	35	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	190	ug/kg	
87-86-5	Pentachlorophenol	ND	1200	190	ug/kg	
108-95-2	Phenol	ND	230	38	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	230	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	230	30	ug/kg	
83-32-9	Acenaphthene	ND	230	28	ug/kg	
208-96-8	Acenaphthylene	ND	230	27	ug/kg	
62-53-3	Aniline	ND	230	74	ug/kg	
120-12-7	Anthracene	ND	230	23	ug/kg	
92-87-5	Benzidine	ND	2300	540	ug/kg	
56-55-3	Benzo(a)anthracene	24.4	230	23	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	230	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	230	23	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	230	23	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	230	28	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	230	30	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	230	47	ug/kg	
100-51-6	Benzyl Alcohol	ND	230	47	ug/kg	
91-58-7	2-Chloronaphthalene	ND	230	30	ug/kg	
106-47-8	4-Chloroaniline	ND	230	35	ug/kg	
86-74-8	Carbazole	ND	230	26	ug/kg	
218-01-9	Chrysene	ND	230	23	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29		
Lab Sample ID:	FA3561-1	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	70.7
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	230	33	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	230	31	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	230	26	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	230	24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	230	23	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	230	26	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	230	31	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	230	25	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	230	24	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	230	28	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	230	39	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	230	23	ug/kg	
132-64-9	Dibenzofuran	ND	230	24	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	470	47	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	230	47	ug/kg	
84-66-2	Diethyl phthalate	ND	470	47	ug/kg	
131-11-3	Dimethyl phthalate	ND	230	47	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	470	47	ug/kg	
206-44-0	Fluoranthene	38.3	230	23	ug/kg	J
86-73-7	Fluorene	ND	230	26	ug/kg	
118-74-1	Hexachlorobenzene	ND	230	23	ug/kg	
87-68-3	Hexachlorobutadiene	ND	230	26	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	230	32	ug/kg	
67-72-1	Hexachloroethane	ND	230	26	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	230	23	ug/kg	
78-59-1	Isophorone	ND	230	25	ug/kg	
90-12-0	1-Methylnaphthalene	ND	230	32	ug/kg	
91-57-6	2-Methylnaphthalene	ND	230	27	ug/kg	
88-74-4	2-Nitroaniline	ND	230	34	ug/kg	
99-09-2	3-Nitroaniline	ND	230	33	ug/kg	
100-01-6	4-Nitroaniline	ND	230	50	ug/kg	
91-20-3	Naphthalene	ND	230	24	ug/kg	
98-95-3	Nitrobenzene	ND	230	34	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	470	33	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	230	25	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	230	47	ug/kg	
85-01-8	Phenanthrene	ND	230	23	ug/kg	
129-00-0	Pyrene	33.7	230	23	ug/kg	J
110-86-1	Pyridine	ND	470	54	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	230	25	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29		
Lab Sample ID:	FA3561-1	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	70.7
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		40-102%
4165-62-2	Phenol-d5	52%		41-100%
118-79-6	2,4,6-Tribromophenol	58%		42-108%
4165-60-0	Nitrobenzene-d5	49%		40-105%
321-60-8	2-Fluorobiphenyl	49%		43-107%
1718-51-0	Terphenyl-d14	71%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29		
Lab Sample ID:	FA3561-1	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	70.7
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR076006.D	10	04/16/13	MM	n/a	n/a	GQR3259
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.67 g	5.0 ml	20.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	458	310	150	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	107%		56-149%
98-08-8	aaa-Trifluorotoluene	88%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29		
Lab Sample ID:	FA3561-1	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	70.7
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY36315.D	1	04/19/13	SJL	04/12/13	OP46431	GYY1330
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	6.01	12	4.7	mg/kg	J
	TPH (> C22-C36)	ND	12	4.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29A		
Lab Sample ID:	FA3561-2	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	71.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0088177.D	1	04/11/13	EP	n/a	n/a	VG3170
Run #2	G0088183.D	1	04/11/13	EP	n/a	n/a	VG3170

	Initial Weight	Methanol Aliquot
Run #1	7.12 g	100 ul
Run #2	7.12 g	10.0 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	3400	1400	ug/kg	
107-02-8	Acrolein	ND	1700	590	ug/kg	
107-13-1	Acrylonitrile	ND	1700	680	ug/kg	
71-43-2	Benzene	ND	340	68	ug/kg	
108-86-1	Bromobenzene	ND	340	74	ug/kg	
74-97-5	Bromochloromethane	ND	340	96	ug/kg	
75-27-4	Bromodichloromethane	ND	340	96	ug/kg	
75-25-2	Bromoform	ND	340	68	ug/kg	
104-51-8	n-Butylbenzene	ND	340	88	ug/kg	
135-98-8	sec-Butylbenzene	1220	340	83	ug/kg	
98-06-6	tert-Butylbenzene	495	340	81	ug/kg	
108-90-7	Chlorobenzene	ND	340	68	ug/kg	
75-00-3	Chloroethane	ND	340	140	ug/kg	
67-66-3	Chloroform	ND	340	68	ug/kg	
95-49-8	o-Chlorotoluene	ND	340	68	ug/kg	
106-43-4	p-Chlorotoluene	ND	340	79	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	1700	680	ug/kg	
75-15-0	Carbon disulfide	ND	340	140	ug/kg	
56-23-5	Carbon tetrachloride	ND	340	78	ug/kg	
75-34-3	1,1-Dichloroethane	ND	340	68	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	340	83	ug/kg	
563-58-6	1,1-Dichloropropene	ND	340	68	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	340	170	ug/kg	
106-93-4	1,2-Dibromoethane	ND	340	68	ug/kg	
107-06-2	1,2-Dichloroethane	ND	340	82	ug/kg	
78-87-5	1,2-Dichloropropane	ND	340	68	ug/kg	
142-28-9	1,3-Dichloropropane	ND	340	68	ug/kg	
594-20-7	2,2-Dichloropropane	ND	340	68	ug/kg	
124-48-1	Dibromochloromethane	ND	340	68	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	340	68	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	340	68	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	340	68	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29A		
Lab Sample ID:	FA3561-2	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	71.9
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	340	68	ug/kg	
95-50-1	o-Dichlorobenzene	ND	340	75	ug/kg	
106-46-7	p-Dichlorobenzene	ND	340	90	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	340	68	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	340	68	ug/kg	
100-41-4	Ethylbenzene	4410 [a]	3400	750	ug/kg	
591-78-6	2-Hexanone	ND	1700	340	ug/kg	
87-68-3	Hexachlorobutadiene	ND	340	140	ug/kg	
110-54-3	Hexane	ND	340	150	ug/kg	
98-82-8	Isopropylbenzene	46200 [a]	3400	900	ug/kg	
99-87-6	p-Isopropyltoluene	ND	340	90	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1700	340	ug/kg	
74-83-9	Methyl bromide	ND	340	140	ug/kg	
74-87-3	Methyl chloride	ND	340	140	ug/kg	
74-95-3	Methylene bromide	ND	340	71	ug/kg	
75-09-2	Methylene chloride	ND	680	310	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1700	340	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	340	68	ug/kg	
91-20-3	Naphthalene	ND	340	140	ug/kg	
103-65-1	n-Propylbenzene	2260	340	70	ug/kg	
100-42-5	Styrene	ND	340	68	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	340	73	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	340	68	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	340	68	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	340	68	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	340	72	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	340	110	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	340	81	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	1860	340	74	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	340	72	ug/kg	
127-18-4	Tetrachloroethylene	ND	340	79	ug/kg	
108-88-3	Toluene	ND	340	68	ug/kg	
79-01-6	Trichloroethylene	ND	340	68	ug/kg	
75-69-4	Trichlorofluoromethane	ND	340	140	ug/kg	
75-01-4	Vinyl chloride	ND	340	68	ug/kg	
108-05-4	Vinyl Acetate	ND	1700	280	ug/kg	
	m,p-Xylene	2230	680	140	ug/kg	
95-47-6	o-Xylene	ND	340	68	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29A		
Lab Sample ID:	FA3561-2	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	71.9
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%	93%	75-124%
2037-26-5	Toluene-D8	99%	97%	75-126%
460-00-4	4-Bromofluorobenzene	100%	99%	71-133%
17060-07-0	1,2-Dichloroethane-D4	93%	97%	72-135%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29A		
Lab Sample ID:	FA3561-2	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	71.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T007369.D	1	04/15/13	FS	04/12/13	OP46429	ST358
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1200	230	ug/kg	
95-57-8	2-Chlorophenol	ND	230	27	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	230	25	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	230	26	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	230	34	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	230	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	460	92	ug/kg	
95-48-7	2-Methylphenol	ND	230	29	ug/kg	
	3&4-Methylphenol	ND	230	48	ug/kg	
88-75-5	2-Nitrophenol	ND	230	35	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	180	ug/kg	
87-86-5	Pentachlorophenol	ND	1200	180	ug/kg	
108-95-2	Phenol	ND	230	38	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	230	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	230	30	ug/kg	
83-32-9	Acenaphthene	ND	230	27	ug/kg	
208-96-8	Acenaphthylene	ND	230	27	ug/kg	
62-53-3	Aniline	ND	230	74	ug/kg	
120-12-7	Anthracene	ND	230	23	ug/kg	
92-87-5	Benzidine	ND	2300	540	ug/kg	
56-55-3	Benzo(a)anthracene	42.9	230	23	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	230	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	29.0	230	23	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	230	23	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	230	28	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	230	29	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	230	46	ug/kg	
100-51-6	Benzyl Alcohol	ND	230	46	ug/kg	
91-58-7	2-Chloronaphthalene	ND	230	30	ug/kg	
106-47-8	4-Chloroaniline	ND	230	35	ug/kg	
86-74-8	Carbazole	ND	230	26	ug/kg	
218-01-9	Chrysene	40.0	230	23	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29A		
Lab Sample ID:	FA3561-2	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	71.9
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	230	32	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	230	31	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	230	26	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	230	24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	230	23	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	230	26	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	230	30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	230	25	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	230	24	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	230	28	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	230	39	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	230	23	ug/kg	
132-64-9	Dibenzofuran	ND	230	23	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	460	46	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	230	46	ug/kg	
84-66-2	Diethyl phthalate	ND	460	46	ug/kg	
131-11-3	Dimethyl phthalate	ND	230	46	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	460	46	ug/kg	
206-44-0	Fluoranthene	97.3	230	23	ug/kg	J
86-73-7	Fluorene	ND	230	26	ug/kg	
118-74-1	Hexachlorobenzene	ND	230	23	ug/kg	
87-68-3	Hexachlorobutadiene	ND	230	25	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	230	32	ug/kg	
67-72-1	Hexachloroethane	ND	230	26	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	230	23	ug/kg	
78-59-1	Isophorone	ND	230	25	ug/kg	
90-12-0	1-Methylnaphthalene	ND	230	31	ug/kg	
91-57-6	2-Methylnaphthalene	ND	230	27	ug/kg	
88-74-4	2-Nitroaniline	ND	230	34	ug/kg	
99-09-2	3-Nitroaniline	ND	230	33	ug/kg	
100-01-6	4-Nitroaniline	ND	230	49	ug/kg	
91-20-3	Naphthalene	ND	230	23	ug/kg	
98-95-3	Nitrobenzene	ND	230	34	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	460	33	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	230	25	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	230	46	ug/kg	
85-01-8	Phenanthrene	52.7	230	23	ug/kg	J
129-00-0	Pyrene	67.7	230	23	ug/kg	J
110-86-1	Pyridine	ND	460	53	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	230	25	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29A		
Lab Sample ID:	FA3561-2	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	71.9
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		40-102%
4165-62-2	Phenol-d5	73%		41-100%
118-79-6	2,4,6-Tribromophenol	88%		42-108%
4165-60-0	Nitrobenzene-d5	73%		40-105%
321-60-8	2-Fluorobiphenyl	69%		43-107%
1718-51-0	Terphenyl-d14	90%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29A		
Lab Sample ID:	FA3561-2	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	71.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR076007.D	10	04/16/13	MM	n/a	n/a	GQR3259
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.12 g	5.0 ml	20.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	447	340	170	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		56-149%
98-08-8	aaa-Trifluorotoluene	87%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72B-29A		
Lab Sample ID:	FA3561-2	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	71.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY36316.D	1	04/19/13	SJL	04/12/13	OP46431	GYY1330
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	6.12	12	4.6	mg/kg	J
	TPH (> C22-C36)	6.00	12	4.6	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73B-27		
Lab Sample ID:	FA3561-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	75.4
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0088178.D	1	04/11/13	EP	n/a	n/a	VG3170
Run #2	G0088184.D	1	04/11/13	EP	n/a	n/a	VG3170

	Initial Weight	Methanol Aliquot
Run #1	7.21 g	100 ul
Run #2	7.21 g	10.0 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	3100	1200	ug/kg	
107-02-8	Acrolein	ND	1600	540	ug/kg	
107-13-1	Acrylonitrile	ND	1600	620	ug/kg	
71-43-2	Benzene	3680 [a]	3100	620	ug/kg	
108-86-1	Bromobenzene	ND	310	67	ug/kg	
74-97-5	Bromochloromethane	ND	310	87	ug/kg	
75-27-4	Bromodichloromethane	ND	310	88	ug/kg	
75-25-2	Bromoform	ND	310	62	ug/kg	
104-51-8	n-Butylbenzene	ND	310	80	ug/kg	
135-98-8	sec-Butylbenzene	1030	310	75	ug/kg	
98-06-6	tert-Butylbenzene	406	310	74	ug/kg	
108-90-7	Chlorobenzene	ND	310	62	ug/kg	
75-00-3	Chloroethane	ND	310	120	ug/kg	
67-66-3	Chloroform	ND	310	62	ug/kg	
95-49-8	o-Chlorotoluene	ND	310	62	ug/kg	
106-43-4	p-Chlorotoluene	ND	310	72	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	1600	620	ug/kg	
75-15-0	Carbon disulfide	ND	310	120	ug/kg	
56-23-5	Carbon tetrachloride	ND	310	71	ug/kg	
75-34-3	1,1-Dichloroethane	ND	310	62	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	310	76	ug/kg	
563-58-6	1,1-Dichloropropene	ND	310	62	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	310	160	ug/kg	
106-93-4	1,2-Dibromoethane	ND	310	62	ug/kg	
107-06-2	1,2-Dichloroethane	ND	310	75	ug/kg	
78-87-5	1,2-Dichloropropane	ND	310	62	ug/kg	
142-28-9	1,3-Dichloropropane	ND	310	62	ug/kg	
594-20-7	2,2-Dichloropropane	ND	310	62	ug/kg	
124-48-1	Dibromochloromethane	ND	310	62	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	310	62	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	310	62	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	310	62	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73B-27		
Lab Sample ID:	FA3561-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	75.4
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	310	62	ug/kg	
95-50-1	o-Dichlorobenzene	ND	310	68	ug/kg	
106-46-7	p-Dichlorobenzene	ND	310	82	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	310	62	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	310	62	ug/kg	
100-41-4	Ethylbenzene	342	310	69	ug/kg	
591-78-6	2-Hexanone	ND	1600	310	ug/kg	
87-68-3	Hexachlorobutadiene	ND	310	130	ug/kg	
110-54-3	Hexane	ND	310	140	ug/kg	
98-82-8	Isopropylbenzene	40800 [a]	3100	820	ug/kg	
99-87-6	p-Isopropyltoluene	ND	310	82	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1600	310	ug/kg	
74-83-9	Methyl bromide	ND	310	120	ug/kg	
74-87-3	Methyl chloride	ND	310	130	ug/kg	
74-95-3	Methylene bromide	ND	310	65	ug/kg	
75-09-2	Methylene chloride	ND	620	280	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1600	310	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	310	62	ug/kg	
91-20-3	Naphthalene	ND	310	120	ug/kg	
103-65-1	n-Propylbenzene	1420	310	64	ug/kg	
100-42-5	Styrene	ND	310	62	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	310	67	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	310	62	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	310	62	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	310	62	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	310	65	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	310	100	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	310	74	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	310	67	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	310	65	ug/kg	
127-18-4	Tetrachloroethylene	ND	310	72	ug/kg	
108-88-3	Toluene	ND	310	62	ug/kg	
79-01-6	Trichloroethylene	ND	310	62	ug/kg	
75-69-4	Trichlorofluoromethane	ND	310	120	ug/kg	
75-01-4	Vinyl chloride	ND	310	62	ug/kg	
108-05-4	Vinyl Acetate	ND	1600	260	ug/kg	
	m,p-Xylene	ND	620	130	ug/kg	
95-47-6	o-Xylene	ND	310	62	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73B-27		
Lab Sample ID:	FA3561-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	75.4
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%	91%	75-124%
2037-26-5	Toluene-D8	94%	98%	75-126%
460-00-4	4-Bromofluorobenzene	98%	98%	71-133%
17060-07-0	1,2-Dichloroethane-D4	97%	96%	72-135%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73B-27		
Lab Sample ID:	FA3561-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	75.4
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T007370.D	1	04/15/13	FS	04/12/13	OP46429	ST358
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1100	220	ug/kg	
95-57-8	2-Chlorophenol	ND	220	26	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	220	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	220	24	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	220	32	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	220	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	430	87	ug/kg	
95-48-7	2-Methylphenol	ND	220	27	ug/kg	
	3&4-Methylphenol	ND	220	45	ug/kg	
88-75-5	2-Nitrophenol	ND	220	33	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	170	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	170	ug/kg	
108-95-2	Phenol	131	220	36	ug/kg	J
95-95-4	2,4,5-Trichlorophenol	ND	220	26	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	220	28	ug/kg	
83-32-9	Acenaphthene	ND	220	26	ug/kg	
208-96-8	Acenaphthylene	ND	220	25	ug/kg	
62-53-3	Aniline	ND	220	70	ug/kg	
120-12-7	Anthracene	ND	220	22	ug/kg	
92-87-5	Benzidine	ND	2200	510	ug/kg	
56-55-3	Benzo(a)anthracene	45.0	220	22	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	220	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	27.2	220	22	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	220	22	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	220	26	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	220	28	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	220	43	ug/kg	
100-51-6	Benzyl Alcohol	ND	220	43	ug/kg	
91-58-7	2-Chloronaphthalene	ND	220	28	ug/kg	
106-47-8	4-Chloroaniline	ND	220	33	ug/kg	
86-74-8	Carbazole	ND	220	24	ug/kg	
218-01-9	Chrysene	39.9	220	22	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73B-27		
Lab Sample ID:	FA3561-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	75.4
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	220	31	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	220	29	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	220	25	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	220	23	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	220	22	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	220	24	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	220	29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	220	23	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	220	23	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	220	26	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	220	36	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	220	22	ug/kg	
132-64-9	Dibenzofuran	ND	220	22	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	430	43	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	220	43	ug/kg	
84-66-2	Diethyl phthalate	ND	430	43	ug/kg	
131-11-3	Dimethyl phthalate	ND	220	43	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	430	43	ug/kg	
206-44-0	Fluoranthene	108	220	22	ug/kg	J
86-73-7	Fluorene	ND	220	24	ug/kg	
118-74-1	Hexachlorobenzene	ND	220	22	ug/kg	
87-68-3	Hexachlorobutadiene	ND	220	24	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	220	30	ug/kg	
67-72-1	Hexachloroethane	ND	220	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	220	22	ug/kg	
78-59-1	Isophorone	ND	220	24	ug/kg	
90-12-0	1-Methylnaphthalene	ND	220	30	ug/kg	
91-57-6	2-Methylnaphthalene	ND	220	25	ug/kg	
88-74-4	2-Nitroaniline	ND	220	32	ug/kg	
99-09-2	3-Nitroaniline	ND	220	31	ug/kg	
100-01-6	4-Nitroaniline	ND	220	47	ug/kg	
91-20-3	Naphthalene	ND	220	22	ug/kg	
98-95-3	Nitrobenzene	ND	220	32	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	430	31	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	220	24	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	220	43	ug/kg	
85-01-8	Phenanthrene	61.4	220	22	ug/kg	J
129-00-0	Pyrene	78.1	220	22	ug/kg	J
110-86-1	Pyridine	ND	430	50	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	220	23	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73B-27		
Lab Sample ID:	FA3561-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	75.4
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		40-102%
4165-62-2	Phenol-d5	77%		41-100%
118-79-6	2,4,6-Tribromophenol	87%		42-108%
4165-60-0	Nitrobenzene-d5	79%		40-105%
321-60-8	2-Fluorobiphenyl	72%		43-107%
1718-51-0	Terphenyl-d14	87%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73B-27		
Lab Sample ID:	FA3561-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	75.4
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR076008.D	1	04/16/13	MM	n/a	n/a	GQR3259
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.50 g	5.0 ml	10.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	266	67	34	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	116%		56-149%
98-08-8	aaa-Trifluorotoluene	88%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73B-27		
Lab Sample ID:	FA3561-3	**Date Sampled:**	04/09/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	75.4
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY36317.D	1	04/19/13	SJL	04/12/13	OP46431	GYY1330
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	6.18	11	4.4	mg/kg	J
	TPH (> C22-C36)	ND	11	4.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74B-28		
Lab Sample ID:	FA3561-4	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0088189.D	1	04/11/13	EP	n/a	n/a	VG3170
Run #2	G0088179.D	1	04/11/13	EP	n/a	n/a	VG3170

	Initial Weight	Methanol Aliquot
Run #1	8.25 g	
Run #2	7.50 g	100 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	41	16	ug/kg	
107-02-8	Acrolein	ND	21	7.2	ug/kg	
107-13-1	Acrylonitrile	ND	21	8.2	ug/kg	
71-43-2	Benzene	5.4	4.1	0.82	ug/kg	
108-86-1	Bromobenzene	ND	4.1	0.89	ug/kg	
74-97-5	Bromochloromethane	ND	4.1	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	4.1	1.2	ug/kg	
75-25-2	Bromoform	ND	4.1	0.82	ug/kg	
104-51-8	n-Butylbenzene	ND	4.1	1.1	ug/kg	
135-98-8	sec-Butylbenzene	12.3	4.1	1.0	ug/kg	
98-06-6	tert-Butylbenzene	18.3	4.1	0.98	ug/kg	
108-90-7	Chlorobenzene	ND	4.1	0.82	ug/kg	
75-00-3	Chloroethane	ND	4.1	1.6	ug/kg	
67-66-3	Chloroform	ND	4.1	0.82	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.1	0.82	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.1	0.95	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	21	8.2	ug/kg	
75-15-0	Carbon disulfide	8.8	4.1	1.6	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.1	0.94	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.1	0.82	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.1	1.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.1	0.82	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.1	2.1	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.1	0.82	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.1	0.99	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.1	0.82	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.1	0.82	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.1	0.82	ug/kg	
124-48-1	Dibromochloromethane	ND	4.1	0.82	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.1	0.82	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.1	0.82	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.1	0.82	ug/kg	

ND = Not detected MDL - Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74B-28		
Lab Sample ID:	FA3561-4	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	4.1	0.82	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.1	0.90	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.1	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.1	0.82	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.1	0.82	ug/kg	
100-41-4	Ethylbenzene	27.4	4.1	0.91	ug/kg	
591-78-6	2-Hexanone	ND	21	4.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.1	1.7	ug/kg	
110-54-3	Hexane	ND	4.1	1.9	ug/kg	
98-82-8	Isopropylbenzene	388 [a]	320	84	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.1	1.1	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	21	4.1	ug/kg	
74-83-9	Methyl bromide	ND	4.1	1.6	ug/kg	
74-87-3	Methyl chloride	ND	4.1	1.7	ug/kg	
74-95-3	Methylene bromide	ND	4.1	0.86	ug/kg	
75-09-2	Methylene chloride	ND	8.2	3.8	ug/kg	
78-93-3	Methyl ethyl ketone	ND	21	4.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.1	0.82	ug/kg	
91-20-3	Naphthalene	ND	4.1	1.6	ug/kg	
103-65-1	n-Propylbenzene	14.4	4.1	0.85	ug/kg	
100-42-5	Styrene	ND	4.1	0.82	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.1	0.88	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.1	0.82	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.1	0.82	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.1	0.82	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.1	0.87	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.1	1.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.1	0.97	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.1	0.89	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.1	0.87	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.1	0.95	ug/kg	
108-88-3	Toluene	1.7	4.1	0.82	ug/kg	J
79-01-6	Trichloroethylene	ND	4.1	0.82	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.1	1.6	ug/kg	
75-01-4	Vinyl chloride	ND	4.1	0.82	ug/kg	
108-05-4	Vinyl Acetate	ND	21	3.4	ug/kg	
	m,p-Xylene	3.2	8.2	1.7	ug/kg	J
95-47-6	o-Xylene	ND	4.1	0.82	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74B-28		
Lab Sample ID:	FA3561-4	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%	88%	75-124%
2037-26-5	Toluene-D8	94%	97%	75-126%
460-00-4	4-Bromofluorobenzene	98%	101%	71-133%
17060-07-0	1,2-Dichloroethane-D4	97%	98%	72-135%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74B-28		
Lab Sample ID:	FA3561-4	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T007371.D	1	04/15/13	FS	04/12/13	OP46429	ST358
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1100	220	ug/kg	
95-57-8	2-Chlorophenol	ND	220	26	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	220	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	220	25	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	220	33	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	220	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	450	89	ug/kg	
95-48-7	2-Methylphenol	ND	220	28	ug/kg	
	3&4-Methylphenol	ND	220	46	ug/kg	
88-75-5	2-Nitrophenol	ND	220	33	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	180	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	180	ug/kg	
108-95-2	Phenol	ND	220	36	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	220	26	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	220	29	ug/kg	
83-32-9	Acenaphthene	ND	220	26	ug/kg	
208-96-8	Acenaphthylene	ND	220	26	ug/kg	
62-53-3	Aniline	ND	220	71	ug/kg	
120-12-7	Anthracene	ND	220	22	ug/kg	
92-87-5	Benzidine	ND	2200	520	ug/kg	
56-55-3	Benzo(a)anthracene	ND	220	22	ug/kg	
50-32-8	Benzo(a)pyrene	ND	220	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	220	22	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	220	22	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	220	27	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	220	28	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	220	45	ug/kg	
100-51-6	Benzyl Alcohol	ND	220	45	ug/kg	
91-58-7	2-Chloronaphthalene	ND	220	29	ug/kg	
106-47-8	4-Chloroaniline	ND	220	34	ug/kg	
86-74-8	Carbazole	ND	220	25	ug/kg	
218-01-9	Chrysene	ND	220	22	ug/kg	

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E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74B-28		
Lab Sample ID:	FA3561-4	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	220	31	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	220	30	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	220	25	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	220	23	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	220	23	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	220	25	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	220	29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	220	24	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	220	23	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	220	27	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	220	37	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	220	22	ug/kg	
132-64-9	Dibenzofuran	ND	220	23	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	450	45	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	220	45	ug/kg	
84-66-2	Diethyl phthalate	ND	450	45	ug/kg	
131-11-3	Dimethyl phthalate	ND	220	45	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	450	45	ug/kg	
206-44-0	Fluoranthene	ND	220	22	ug/kg	
86-73-7	Fluorene	ND	220	25	ug/kg	
118-74-1	Hexachlorobenzene	ND	220	22	ug/kg	
87-68-3	Hexachlorobutadiene	ND	220	24	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	220	31	ug/kg	
67-72-1	Hexachloroethane	ND	220	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	220	22	ug/kg	
78-59-1	Isophorone	ND	220	24	ug/kg	
90-12-0	1-Methylnaphthalene	ND	220	30	ug/kg	
91-57-6	2-Methylnaphthalene	ND	220	26	ug/kg	
88-74-4	2-Nitroaniline	ND	220	33	ug/kg	
99-09-2	3-Nitroaniline	ND	220	31	ug/kg	
100-01-6	4-Nitroaniline	ND	220	48	ug/kg	
91-20-3	Naphthalene	ND	220	23	ug/kg	
98-95-3	Nitrobenzene	ND	220	32	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	450	32	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	220	24	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	220	45	ug/kg	
85-01-8	Phenanthrene	ND	220	22	ug/kg	
129-00-0	Pyrene	ND	220	22	ug/kg	
110-86-1	Pyridine	ND	450	51	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	220	24	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74B-28		
Lab Sample ID:	FA3561-4	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		40-102%
4165-62-2	Phenol-d5	78%		41-100%
118-79-6	2,4,6-Tribromophenol	89%		42-108%
4165-60-0	Nitrobenzene-d5	78%		40-105%
321-60-8	2-Fluorobiphenyl	72%		43-107%
1718-51-0	Terphenyl-d14	92%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74B-28		
Lab Sample ID:	FA3561-4	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR076034.D	1	04/17/13	MM	n/a	n/a	GQR3260
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.68 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	33.1	6.2	3.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	124%		56-149%
98-08-8	aaa-Trifluorotoluene	121%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74B-28		
Lab Sample ID:	FA3561-4	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	73.5
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY36318.D	1	04/19/13	SJL	04/12/13	OP46431	GYY1330
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	11	4.5	mg/kg	
	TPH (> C22-C36)	ND	11	4.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76B-30		
Lab Sample ID:	FA3561-5	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	78.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0088190.D	1	04/11/13	EP	n/a	n/a	VG3170
Run #2							

	Initial Weight
Run #1	8.04 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	195	39	16	ug/kg	
107-02-8	Acrolein	ND	20	6.9	ug/kg	
107-13-1	Acrylonitrile	ND	20	7.9	ug/kg	
71-43-2	Benzene	ND	3.9	0.79	ug/kg	
108-86-1	Bromobenzene	ND	3.9	0.85	ug/kg	
74-97-5	Bromochloromethane	ND	3.9	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	3.9	1.1	ug/kg	
75-25-2	Bromoform	ND	3.9	0.79	ug/kg	
104-51-8	n-Butylbenzene	ND	3.9	1.0	ug/kg	
135-98-8	sec-Butylbenzene	15.8	3.9	0.95	ug/kg	
98-06-6	tert-Butylbenzene	26.0	3.9	0.94	ug/kg	
108-90-7	Chlorobenzene	ND	3.9	0.79	ug/kg	
75-00-3	Chloroethane	ND	3.9	1.6	ug/kg	
67-66-3	Chloroform	ND	3.9	0.79	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.9	0.79	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.9	0.91	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	20	7.9	ug/kg	
75-15-0	Carbon disulfide	2.3	3.9	1.6	ug/kg	J
56-23-5	Carbon tetrachloride	ND	3.9	0.90	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.9	0.79	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.9	0.96	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.9	0.79	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.9	2.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.9	0.79	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.9	0.95	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.9	0.79	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.9	0.79	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.9	0.79	ug/kg	
124-48-1	Dibromochloromethane	ND	3.9	0.79	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.9	0.79	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.9	0.79	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.9	0.79	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76B-30		
Lab Sample ID:	FA3561-5	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	78.8
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	3.9	0.79	ug/kg	
95-50-1	o-Dichlorobenzene	ND	3.9	0.86	ug/kg	
106-46-7	p-Dichlorobenzene	ND	3.9	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.9	0.79	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.9	0.79	ug/kg	
100-41-4	Ethylbenzene	ND	3.9	0.87	ug/kg	
591-78-6	2-Hexanone	ND	20	3.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.9	1.6	ug/kg	
110-54-3	Hexane	ND	3.9	1.8	ug/kg	
98-82-8	Isopropylbenzene	2.2	3.9	1.0	ug/kg	J
99-87-6	p-Isopropyltoluene	ND	3.9	1.0	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	3.9	ug/kg	
74-83-9	Methyl bromide	ND	3.9	1.6	ug/kg	
74-87-3	Methyl chloride	ND	3.9	1.6	ug/kg	
74-95-3	Methylene bromide	ND	3.9	0.82	ug/kg	
75-09-2	Methylene chloride	ND	7.9	3.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	3.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.9	0.79	ug/kg	
91-20-3	Naphthalene	ND	3.9	1.6	ug/kg	
103-65-1	n-Propylbenzene	ND	3.9	0.81	ug/kg	
100-42-5	Styrene	ND	3.9	0.79	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.9	0.84	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.9	0.79	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.9	0.79	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.9	0.79	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.9	0.83	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.9	1.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.9	0.93	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.9	0.85	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.9	0.83	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.9	0.91	ug/kg	
108-88-3	Toluene	ND	3.9	0.79	ug/kg	
79-01-6	Trichloroethylene	ND	3.9	0.79	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.9	1.6	ug/kg	
75-01-4	Vinyl chloride	ND	3.9	0.79	ug/kg	
108-05-4	Vinyl Acetate	ND	20	3.3	ug/kg	
	m,p-Xylene	ND	7.9	1.6	ug/kg	
95-47-6	o-Xylene	ND	3.9	0.79	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76B-30		
Lab Sample ID:	FA3561-5	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	78.8
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		75-124%
2037-26-5	Toluene-D8	95%		75-126%
460-00-4	4-Bromofluorobenzene	95%		71-133%
17060-07-0	1,2-Dichloroethane-D4	99%		72-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76B-30		
Lab Sample ID:	FA3561-5	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	78.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T007372.D	1	04/15/13	FS	04/12/13	OP46429	ST358
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1000	210	ug/kg	
95-57-8	2-Chlorophenol	ND	210	24	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	23	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	31	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	210	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	420	83	ug/kg	
95-48-7	2-Methylphenol	ND	210	26	ug/kg	
	3&4-Methylphenol	ND	210	43	ug/kg	
88-75-5	2-Nitrophenol	ND	210	31	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	170	ug/kg	
87-86-5	Pentachlorophenol	ND	1000	170	ug/kg	
108-95-2	Phenol	ND	210	34	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	27	ug/kg	
83-32-9	Acenaphthene	ND	210	25	ug/kg	
208-96-8	Acenaphthylene	ND	210	24	ug/kg	
62-53-3	Aniline	ND	210	67	ug/kg	
120-12-7	Anthracene	ND	210	21	ug/kg	
92-87-5	Benzidine	ND	2100	490	ug/kg	
56-55-3	Benzo(a)anthracene	ND	210	21	ug/kg	
50-32-8	Benzo(a)pyrene	ND	210	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	210	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	210	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	210	25	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	210	27	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	210	42	ug/kg	
100-51-6	Benzyl Alcohol	ND	210	42	ug/kg	
91-58-7	2-Chloronaphthalene	ND	210	27	ug/kg	
106-47-8	4-Chloroaniline	ND	210	31	ug/kg	
86-74-8	Carbazole	ND	210	23	ug/kg	
218-01-9	Chrysene	ND	210	21	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76B-30		
Lab Sample ID:	FA3561-5	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	78.8
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	210	29	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	24	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	21	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	22	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	22	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	25	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	210	35	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	210	21	ug/kg	
132-64-9	Dibenzofuran	ND	210	21	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	420	42	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	210	42	ug/kg	
84-66-2	Diethyl phthalate	ND	420	42	ug/kg	
131-11-3	Dimethyl phthalate	ND	210	42	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	420	42	ug/kg	
206-44-0	Fluoranthene	ND	210	21	ug/kg	
86-73-7	Fluorene	ND	210	23	ug/kg	
118-74-1	Hexachlorobenzene	ND	210	21	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	23	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	29	ug/kg	
67-72-1	Hexachloroethane	ND	210	24	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	210	21	ug/kg	
78-59-1	Isophorone	ND	210	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	210	28	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	24	ug/kg	
88-74-4	2-Nitroaniline	ND	210	31	ug/kg	
99-09-2	3-Nitroaniline	ND	210	29	ug/kg	
100-01-6	4-Nitroaniline	ND	210	45	ug/kg	
91-20-3	Naphthalene	ND	210	21	ug/kg	
98-95-3	Nitrobenzene	ND	210	30	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	420	30	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	23	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	42	ug/kg	
85-01-8	Phenanthrene	ND	210	21	ug/kg	
129-00-0	Pyrene	ND	210	21	ug/kg	
110-86-1	Pyridine	ND	420	48	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	22	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76B-30		
Lab Sample ID:	FA3561-5	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	78.8
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	64%		40-102%
4165-62-2	Phenol-d5	77%		41-100%
118-79-6	2,4,6-Tribromophenol	92%		42-108%
4165-60-0	Nitrobenzene-d5	79%		40-105%
321-60-8	2-Fluorobiphenyl	74%		43-107%
1718-51-0	Terphenyl-d14	95%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76B-30		
Lab Sample ID:	FA3561-5	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	78.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR076010.D	1	04/16/13	MM	n/a	n/a	GQR3259
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.08 g	5.0 ml	10.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	124	53	26	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	114%		56-149%
98-08-8	aaa-Trifluorotoluene	88%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76B-30		
Lab Sample ID:	FA3561-5	**Date Sampled:**	04/10/13
Matrix:	SO - Soil	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	78.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY36319.D	1	04/19/13	SJL	04/12/13	OP46431	GYY1330
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	10	4.2	mg/kg	
	TPH (> C22-C36)	ND	10	4.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3561-6	**Date Sampled:**	04/09/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0088181.D	1	04/11/13	EP	n/a	n/a	VG3170
Run #2							

	Initial Weight
Run #1	5.00 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3561-6	**Date Sampled:**	04/09/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3561-6	**Date Sampled:**	04/09/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		80-121%
2037-26-5	Toluene-D8	99%		71-130%
460-00-4	4-Bromofluorobenzene	99%		59-148%
17060-07-0	1,2-Dichloroethane-D4	98%		77-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA3561

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 04102013-01
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (Soil - Semiannual # 2)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO							Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
1	SS61-SB72B-29	SS61-SB72	4/9/2013	1440	28-29	N	1	SO	5	X	X	X	X										1
2	SS61-SB72B-29-A	SS61-SB72	4/9/2013	1440	28-29	FD	1	SO	5	X	X	X	X										1
3	SS61-SB73B-27	SS61-SB73	4/9/2013	1635	26-27	N	1	SO	5	X	X	X	X										1
4	SS61-SB74B-28	SS61-SB74	4/10/2013	0900	27-28	N	1	SO	5	X	X	X	X										1
5	SS61-SB76B-30	SS61-SB76	4/10/2013	1100	29-30	N	1	SO	5	X	X	X	X										1
6	Trip Blank				-	TB	1	SQ	3	X													1
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS:

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. J Hollowa	4/10/13	1400	1. [illegible]		
2. [illegible]	04/10/13	1000	2. R Willm	04/10/13	1000
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7994 8773 6442
Analytical Lab: Accutest Labs
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

20

5.1 5

FA3561: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA3561 CLIENT: B-hate PROJECT: SS-61 (soil Semi-vol)

DATE/TIME RECEIVED: 04-11-13 1000 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: _____

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7994 8773 6442

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [x] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? 5 1181

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 1.6
- [ ] CORRECTED TEMPS: 2.0

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE RWilm 04-11-13 REVIEWER SIGNATURE/DATE [signature] 04/11/13

NF 12/10

receipt confirmation 122910.xls

5.1

5

FA3561: Chain of Custody

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Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3170-MB	G0088171.D	1	04/11/13	EP	n/a	n/a	VG3170

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5, FA3561-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3170-MB	G0088171.D	1	04/11/13	EP	n/a	n/a	VG3170

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5, FA3561-6

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3170-MB	G0088171.D	1	04/11/13	EP	n/a	n/a	VG3170

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5, FA3561-6

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	93%	80-121%
2037-26-5	Toluene-D8	96%	71-130%
460-00-4	4-Bromofluorobenzene	100%	59-148%
17060-07-0	1,2-Dichloroethane-D4	102%	77-123%

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3170-BS	G0088170.D	1	04/11/13	EP	n/a	n/a	VG3170

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5, FA3561-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	316	126	61-144
107-02-8	Acrolein	250	264	106	27-156
107-13-1	Acrylonitrile	250	285	114	55-144
71-43-2	Benzene	50	55.4	111	78-130
108-86-1	Bromobenzene	50	52.2	104	78-123
74-97-5	Bromochloromethane	50	50.5	101	72-122
75-27-4	Bromodichloromethane	50	59.2	118	73-122
75-25-2	Bromoform	50	55.3	111	70-139
104-51-8	n-Butylbenzene	50	53.8	108	80-138
135-98-8	sec-Butylbenzene	50	57.0	114	82-132
98-06-6	tert-Butylbenzene	50	54.9	110	79-130
108-90-7	Chlorobenzene	50	56.7	113	83-122
75-00-3	Chloroethane	50	50.6	101	61-153
67-66-3	Chloroform	50	55.3	111	79-129
95-49-8	o-Chlorotoluene	50	54.3	109	77-123
106-43-4	p-Chlorotoluene	50	56.2	112	78-129
110-75-8	2-Chloroethyl vinyl ether	250	279	112	52-142
75-15-0	Carbon disulfide	50	53.2	106	61-142
56-23-5	Carbon tetrachloride	50	56.6	113	79-135
75-34-3	1,1-Dichloroethane	50	55.5	111	77-132
75-35-4	1,1-Dichloroethylene	50	59.8	120	66-132
563-58-6	1,1-Dichloropropene	50	58.0	116	81-133
96-12-8	1,2-Dibromo-3-chloropropane	50	53.3	107	67-129
106-93-4	1,2-Dibromoethane	50	58.0	116	77-126
107-06-2	1,2-Dichloroethane	50	57.9	116	78-129
78-87-5	1,2-Dichloropropane	50	55.0	110	74-127
142-28-9	1,3-Dichloropropane	50	54.3	109	78-118
594-20-7	2,2-Dichloropropane	50	55.2	110	80-137
124-48-1	Dibromochloromethane	50	57.7	115	78-117
75-71-8	Dichlorodifluoromethane	50	49.6	99	35-162
156-59-2	cis-1,2-Dichloroethylene	50	53.8	108	74-123
10061-01-5	cis-1,3-Dichloropropene	50	54.4	109	79-130
541-73-1	m-Dichlorobenzene	50	54.9	110	82-126
95-50-1	o-Dichlorobenzene	50	54.0	108	83-123
106-46-7	p-Dichlorobenzene	50	52.7	105	84-124
156-60-5	trans-1,2-Dichloroethylene	50	56.9	114	77-129

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3170-BS	G0088170.D	1	04/11/13	EP	n/a	n/a	VG3170

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5, FA3561-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	59.6	119	87-131
100-41-4	Ethylbenzene	50	53.7	107	82-124
591-78-6	2-Hexanone	250	289	116	67-130
87-68-3	Hexachlorobutadiene	50	49.3	99	77-150
110-54-3	Hexane	50	52.9	106	65-147
98-82-8	Isopropylbenzene	50	58.8	118	82-133
99-87-6	p-Isopropyltoluene	50	55.4	111	82-132
108-10-1	4-Methyl-2-pentanone	250	275	110	69-125
74-83-9	Methyl bromide	50	58.4	117	60-146
74-87-3	Methyl chloride	50	53.9	108	58-163
74-95-3	Methylene bromide	50	53.6	107	75-128
75-09-2	Methylene chloride	50	55.2	110	62-140
78-93-3	Methyl ethyl ketone	250	304	122	66-134
1634-04-4	Methyl Tert Butyl Ether	50	52.7	105	70-131
91-20-3	Naphthalene	50	53.2	106	59-143
103-65-1	n-Propylbenzene	50	57.7	115	78-129
100-42-5	Styrene	50	55.0	110	79-123
630-20-6	1,1,1,2-Tetrachloroethane	50	56.9	114	81-121
71-55-6	1,1,1-Trichloroethane	50	55.8	112	80-133
79-34-5	1,1,2,2-Tetrachloroethane	50	55.5	111	70-128
79-00-5	1,1,2-Trichloroethane	50	55.5	111	76-118
87-61-6	1,2,3-Trichlorobenzene	50	49.8	100	78-136
96-18-4	1,2,3-Trichloropropane	50	56.9	114	74-125
120-82-1	1,2,4-Trichlorobenzene	50	52.5	105	82-137
95-63-6	1,2,4-Trimethylbenzene	50	52.8	106	77-129
108-67-8	1,3,5-Trimethylbenzene	50	52.5	105	79-129
127-18-4	Tetrachloroethylene	50	56.7	113	79-132
108-88-3	Toluene	50	53.5	107	80-123
79-01-6	Trichloroethylene	50	57.3	115	78-132
75-69-4	Trichlorofluoromethane	50	58.1	116	67-149
75-01-4	Vinyl chloride	50	57.9	116	60-145
108-05-4	Vinyl Acetate	250	303	121	25-164
	m,p-Xylene	100	112	112	82-128
95-47-6	o-Xylene	50	57.7	115	82-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3170-BS	G0088170.D	1	04/11/13	EP	n/a	n/a	VG3170

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5, FA3561-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	80-121%
2037-26-5	Toluene-D8	99%	71-130%
460-00-4	4-Bromofluorobenzene	98%	59-148%
17060-07-0	1,2-Dichloroethane-D4	98%	77-123%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3549-1MS	G0088174.D	1	04/11/13	EP	n/a	n/a	VG3170
FA3549-1MSD	G0088175.D	1	04/11/13	EP	n/a	n/a	VG3170
FA3549-1	G0088172.D	1	04/11/13	EP	n/a	n/a	VG3170

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5, FA3561-6

CAS No.	Compound	FA3549-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	41 U		351	355	101	328	101	8	61-144/29
107-02-8	Acrolein	20 U		351	263	75	216	66	20	27-156/39
107-13-1	Acrylonitrile	20 U		351	343	98	319	98	7	55-144/24
71-43-2	Benzene	4.1 U		70.1	70.0	100	65.1	100	7	78-130/25
108-86-1	Bromobenzene	4.1 U		70.1	69.9	100	65.1	100	7	78-123/30
74-97-5	Bromochloromethane	4.1 U		70.1	64.2	92	61.9	95	4	72-122/23
75-27-4	Bromodichloromethane	4.1 U		70.1	74.3	106	69.5	107	7	73-122/25
75-25-2	Bromoform	4.1 U		70.1	70.7	101	66.1	101	7	70-139/26
104-51-8	n-Butylbenzene	4.1 U		70.1	69.4	99	65.5	101	6	80-138/31
135-98-8	sec-Butylbenzene	1.5	I	70.1	74.2	104	71.5	107	4	82-132/29
98-06-6	tert-Butylbenzene	4.1 U		70.1	73.7	105	69.0	106	7	79-130/29
108-90-7	Chlorobenzene	4.1 U		70.1	72.8	104	67.7	104	7	83-122/23
75-00-3	Chloroethane	4.1 U		70.1	68.6	98	64.0	98	7	61-153/31
67-66-3	Chloroform	4.1 U		70.1	71.1	101	65.9	101	8	79-129/27
95-49-8	o-Chlorotoluene	4.1 U		70.1	72.2	103	68.2	105	6	77-123/31
106-43-4	p-Chlorotoluene	4.1 U		70.1	72.3	103	69.7	107	4	78-129/29
110-75-8	2-Chloroethyl vinyl ether	20 U		351	326	93	289	89	12	52-142/25
75-15-0	Carbon disulfide	4.1 U		70.1	73.2	104	70.2	108	4	61-142/27
56-23-5	Carbon tetrachloride	4.1 U		70.1	73.7	105	70.3	108	5	79-135/29
75-34-3	1,1-Dichloroethane	4.1 U		70.1	69.6	99	66.7	102	4	77-132/26
75-35-4	1,1-Dichloroethylene	4.1 U		70.1	76.3	109	71.8	110	6	66-132/27
563-58-6	1,1-Dichloropropene	4.1 U		70.1	76.2	109	69.1	106	10	81-133/26
96-12-8	1,2-Dibromo-3-chloropropane	4.1 U		70.1	71.7	102	70.2	108	2	67-129/29
106-93-4	1,2-Dibromoethane	4.1 U		70.1	72.7	104	67.4	103	8	77-126/24
107-06-2	1,2-Dichloroethane	4.1 U		70.1	71.1	101	66.6	102	7	78-129/24
78-87-5	1,2-Dichloropropane	4.1 U		70.1	70.1	100	63.5	97	10	74-127/27
142-28-9	1,3-Dichloropropane	4.1 U		70.1	68.0	97	65.0	100	5	78-118/26
594-20-7	2,2-Dichloropropane	4.1 U		70.1	71.8	102	64.7	99	10	80-137/28
124-48-1	Dibromochloromethane	4.1 U		70.1	74.6	106	68.7	105	8	78-117/27
75-71-8	Dichlorodifluoromethane	4.1 U		70.1	66.0	94	62.0	95	6	35-162/30
156-59-2	cis-1,2-Dichloroethylene	4.1 U		70.1	70.2	100	65.0	100	8	74-123/26
10061-01-5	cis-1,3-Dichloropropene	4.1 U		70.1	70.6	101	64.0	98	10	79-130/23
541-73-1	m-Dichlorobenzene	4.1 U		70.1	71.8	102	67.2	103	7	82-126/29
95-50-1	o-Dichlorobenzene	4.1 U		70.1	70.3	100	65.6	101	7	83-123/28
106-46-7	p-Dichlorobenzene	4.1 U		70.1	68.0	97	63.5	97	7	84-124/28
156-60-5	trans-1,2-Dichloroethylene	4.1 U		70.1	71.6	102	67.0	103	7	77-129/27

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3549-1MS	G0088174.D	1	04/11/13	EP	n/a	n/a	VG3170
FA3549-1MSD	G0088175.D	1	04/11/13	EP	n/a	n/a	VG3170
FA3549-1	G0088172.D	1	04/11/13	EP	n/a	n/a	VG3170

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5, FA3561-6

CAS No.	Compound	FA3549-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	4.1 U		70.1	73.9	105	68.0	104	8	87-131/27
100-41-4	Ethylbenzene	14.8		70.1	76.5	88	74.7	92	2	82-124/25
591-78-6	2-Hexanone	20 U		351	337	96	317	97	6	67-130/29
87-68-3	Hexachlorobutadiene	4.1 U		70.1	55.9	80	50.6	78	10	77-150/36
110-54-3	Hexane	4.1 U		70.1	64.7	92	62.4	96	4	65-147/27
98-82-8	Isopropylbenzene	5.4		70.1	78.1	104	75.2	107	4	82-133/27
99-87-6	p-Isopropyltoluene	4.1 U		70.1	72.6	104	69.2	106	5	82-132/29
108-10-1	4-Methyl-2-pentanone	20 U		351	341	97	318	98	7	69-125/24
74-83-9	Methyl bromide	4.1 U		70.1	74.2	106	75.1	115	1	60-146/31
74-87-3	Methyl chloride	4.1 U		70.1	70.6	101	64.4	99	9	58-163/26
74-95-3	Methylene bromide	4.1 U		70.1	68.9	98	63.7	98	8	75-128/26
75-09-2	Methylene chloride	8.2 U		70.1	70.8	101	66.1	101	7	62-140/25
78-93-3	Methyl ethyl ketone	20 U		351	347	99	318	98	9	66-134/23
1634-04-4	Methyl Tert Butyl Ether	4.1 U		70.1	65.6	94	62.4	96	5	70-131/25
91-20-3	Naphthalene	74.8		70.1	151	109	177	157*	16	59-143/31
103-65-1	n-Propylbenzene	7.9		70.1	81.5	105	80.7	112	1	78-129/29
100-42-5	Styrene	4.1 U		70.1	69.1	99	63.3	97	9	79-123/28
630-20-6	1,1,1,2-Tetrachloroethane	4.1 U		70.1	70.9	101	67.1	103	6	81-121/25
71-55-6	1,1,1-Trichloroethane	4.1 U		70.1	73.8	105	69.7	107	6	80-133/27
79-34-5	1,1,2,2-Tetrachloroethane	4.1 U		70.1	70.1	100	65.5	101	7	70-128/30
79-00-5	1,1,2-Trichloroethane	4.1 U		70.1	71.9	103	69.4	107	4	76-118/28
87-61-6	1,2,3-Trichlorobenzene	4.1 U		70.1	57.5	82	52.3	80	9	78-136/34
96-18-4	1,2,3-Trichloropropane	4.1 U		70.1	70.1	100	67.8	104	3	74-125/30
120-82-1	1,2,4-Trichlorobenzene	4.1 U		70.1	65.1	93	58.8	90	10	82-137/32
95-63-6	1,2,4-Trimethylbenzene	37.1		70.1	101	91	119	126	16	77-129/29
108-67-8	1,3,5-Trimethylbenzene	3.4	I	70.1	71.8	98	71.1	104	1	79-129/31
127-18-4	Tetrachloroethylene	4.1 U		70.1	68.7	98	61.8	95	11	79-132/27
108-88-3	Toluene	4.1 U		70.1	70.9	101	65.2	100	8	80-123/26
79-01-6	Trichloroethylene	4.1 U		70.1	73.5	105	67.6	104	8	78-132/28
75-69-4	Trichlorofluoromethane	4.1 U		70.1	74.4	106	70.4	108	6	67-149/29
75-01-4	Vinyl chloride	4.1 U		70.1	72.8	104	68.4	105	6	60-145/29
108-05-4	Vinyl Acetate	20 U		351	398	114	375	115	6	25-164/35
	m,p-Xylene	20.0		140	155	96	150	100	3	82-128/25
95-47-6	o-Xylene	4.1 U		70.1	73.1	104	67.5	104	8	82-126/25

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3549-1MS	G0088174.D	1	04/11/13	EP	n/a	n/a	VG3170
FA3549-1MSD	G0088175.D	1	04/11/13	EP	n/a	n/a	VG3170
FA3549-1	G0088172.D	1	04/11/13	EP	n/a	n/a	VG3170

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5, FA3561-6

CAS No.	Surrogate Recoveries	MS	MSD	FA3549-1	Limits
1868-53-7	Dibromofluoromethane	99%	96%	93%	80-121%
2037-26-5	Toluene-D8	99%	99%	97%	71-130%
460-00-4	4-Bromofluorobenzene	99%	102%	98%	59-148%
17060-07-0	1,2-Dichloroethane-D4	97%	94%	100%	77-123%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MB	T007333.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-1

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	830	170	ug/kg	
95-57-8	2-Chlorophenol	ND	170	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	18	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	19	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	24	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	21	ug/kg	
	3&4-Methylphenol	ND	170	35	ug/kg	
88-75-5	2-Nitrophenol	ND	170	25	ug/kg	
100-02-7	4-Nitrophenol	ND	830	130	ug/kg	
87-86-5	Pentachlorophenol	ND	830	130	ug/kg	
108-95-2	Phenol	ND	170	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	20	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	21	ug/kg	
83-32-9	Acenaphthene	ND	170	20	ug/kg	
208-96-8	Acenaphthylene	ND	170	19	ug/kg	
62-53-3	Aniline	ND	170	53	ug/kg	
120-12-7	Anthracene	ND	170	17	ug/kg	
92-87-5	Benzidine	ND	1700	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	21	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	22	ug/kg	
106-47-8	4-Chloroaniline	ND	170	25	ug/kg	
86-74-8	Carbazole	ND	170	18	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	23	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	17	ug/kg	

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MB	T007333.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	170	17	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	18	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	17	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	17	ug/kg	
132-64-9	Dibenzofuran	ND	170	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate	ND	330	33	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	33	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	33	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	23	ug/kg	
67-72-1	Hexachloroethane	ND	170	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	17	ug/kg	
78-59-1	Isophorone	ND	170	18	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	23	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	25	ug/kg	
99-09-2	3-Nitroaniline	ND	170	23	ug/kg	
100-01-6	4-Nitroaniline	ND	170	36	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
98-95-3	Nitrobenzene	ND	170	24	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	24	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	17	ug/kg	
110-86-1	Pyridine	ND	330	38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	18	ug/kg	

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MB	T007333.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-1

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	73%	40-102%
4165-62-2	Phenol-d5	77%	41-100%
118-79-6	2,4,6-Tribromophenol	79%	42-108%
4165-60-0	Nitrobenzene-d5	78%	40-105%
321-60-8	2-Fluorobiphenyl	69%	43-107%
1718-51-0	Terphenyl-d14	90%	45-119%

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46429-MB	T007365.D	1	04/15/13	FS	04/12/13	OP46429	ST358

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	830	170	ug/kg	
95-57-8	2-Chlorophenol	ND	170	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	18	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	19	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	24	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	21	ug/kg	
	3&4-Methylphenol	ND	170	35	ug/kg	
88-75-5	2-Nitrophenol	ND	170	25	ug/kg	
100-02-7	4-Nitrophenol	ND	830	130	ug/kg	
87-86-5	Pentachlorophenol	ND	830	130	ug/kg	
108-95-2	Phenol	ND	170	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	20	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	21	ug/kg	
83-32-9	Acenaphthene	ND	170	20	ug/kg	
208-96-8	Acenaphthylene	ND	170	19	ug/kg	
62-53-3	Aniline	ND	170	53	ug/kg	
120-12-7	Anthracene	ND	170	17	ug/kg	
92-87-5	Benzidine	ND	1700	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	21	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	22	ug/kg	
106-47-8	4-Chloroaniline	ND	170	25	ug/kg	
86-74-8	Carbazole	ND	170	18	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	23	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	17	ug/kg	

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46429-MB	T007365.D	1	04/15/13	FS	04/12/13	OP46429	ST358

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	170	17	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	18	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	17	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	17	ug/kg	
132-64-9	Dibenzofuran	ND	170	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate	ND	330	33	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	33	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	33	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	23	ug/kg	
67-72-1	Hexachloroethane	ND	170	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	17	ug/kg	
78-59-1	Isophorone	ND	170	18	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	23	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	25	ug/kg	
99-09-2	3-Nitroaniline	ND	170	23	ug/kg	
100-01-6	4-Nitroaniline	ND	170	36	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
98-95-3	Nitrobenzene	ND	170	24	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	24	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	17	ug/kg	
110-86-1	Pyridine	ND	330	38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	18	ug/kg	

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46429-MB	T007365.D	1	04/15/13	FS	04/12/13	OP46429	ST358

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	74%	40-102%
4165-62-2	Phenol-d5	82%	41-100%
118-79-6	2,4,6-Tribromophenol	84%	42-108%
4165-60-0	Nitrobenzene-d5	88%	40-105%
321-60-8	2-Fluorobiphenyl	75%	43-107%
1718-51-0	Terphenyl-d14	85%	45-119%

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-BS	T007332.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic Acid	3330	2920	88	44-116
95-57-8	2-Chlorophenol	1670	1170	70	54-97
59-50-7	4-Chloro-3-methyl phenol	1670	1440	86	59-102
120-83-2	2,4-Dichlorophenol	1670	1360	82	60-101
105-67-9	2,4-Dimethylphenol	1670	1340	80	49-89
51-28-5	2,4-Dinitrophenol	3330	2540	76	39-107
534-52-1	4,6-Dinitro-o-cresol	3330	2820	85	58-109
95-48-7	2-Methylphenol	1670	1210	73	53-94
	3&4-Methylphenol	3330	2550	77	54-95
88-75-5	2-Nitrophenol	1670	1270	76	55-96
100-02-7	4-Nitrophenol	3330	2600	78	56-106
87-86-5	Pentachlorophenol	3330	2760	83	50-115
108-95-2	Phenol	1670	1230	74	55-99
95-95-4	2,4,5-Trichlorophenol	1670	1280	77	60-101
88-06-2	2,4,6-Trichlorophenol	1670	1260	76	60-100
83-32-9	Acenaphthene	2330	1680	72	59-97
208-96-8	Acenaphthylene	1670	1280	77	58-98
62-53-3	Aniline	1670	1060	64	38-92
120-12-7	Anthracene	2330	1790	77	61-104
56-55-3	Benzo(a)anthracene	2330	1920	82	60-106
50-32-8	Benzo(a)pyrene	2330	1830	78	59-102
205-99-2	Benzo(b)fluoranthene	2330	1980	85	60-107
191-24-2	Benzo(g,h,i)perylene	2330	1850	79	56-103
207-08-9	Benzo(k)fluoranthene	2330	1940	83	61-107
101-55-3	4-Bromophenyl phenyl ether	1670	1370	82	60-104
85-68-7	Butyl benzyl phthalate	1670	1560	94	57-110
100-51-6	Benzyl Alcohol	1670	1240	74	51-102
91-58-7	2-Chloronaphthalene	1670	1220	73	57-95
106-47-8	4-Chloroaniline	1670	1100	66	19-85
86-74-8	Carbazole	1670	1330	80	60-106
218-01-9	Chrysene	2330	1900	81	60-107
111-91-1	bis(2-Chloroethoxy)methane	1670	1300	78	51-89
111-44-4	bis(2-Chloroethyl)ether	1670	1120	67	50-96
108-60-1	bis(2-Chloroisopropyl)ether	1670	969	58	44-94
7005-72-3	4-Chlorophenyl phenyl ether	1670	1270	76	60-101
95-50-1	1,2-Dichlorobenzene	1670	1110	67	47-91

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-BS	T007332.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
122-66-7	1,2-Diphenylhydrazine	1670	1450	87	58-104
541-73-1	1,3-Dichlorobenzene	1670	1070	64	45-86
106-46-7	1,4-Dichlorobenzene	1670	1100	66	45-88
121-14-2	2,4-Dinitrotoluene	1670	1330	80	59-103
606-20-2	2,6-Dinitrotoluene	1670	1330	80	57-99
91-94-1	3,3'-Dichlorobenzidine	1670	1230	74	34-88
53-70-3	Dibenzo(a,h)anthracene	2330	1940	83	57-105
132-64-9	Dibenzofuran	1670	1240	74	58-103
84-74-2	Di-n-butyl phthalate	1670	1400	84	59-105
117-84-0	Di-n-octyl phthalate	1670	1630	98	59-117
84-66-2	Diethyl phthalate	1670	1370	82	59-106
131-11-3	Dimethyl phthalate	1670	1310	79	60-100
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1560	94	57-111
206-44-0	Fluoranthene	1670	1310	79	60-110
86-73-7	Fluorene	2330	1710	73	60-99
118-74-1	Hexachlorobenzene	1670	1410	85	58-103
87-68-3	Hexachlorobutadiene	1670	1240	74	49-95
77-47-4	Hexachlorocyclopentadiene	1670	1120	67	36-94
67-72-1	Hexachloroethane	1670	1120	67	44-89
193-39-5	Indeno(1,2,3-cd)pyrene	2330	1980	85	57-104
78-59-1	Isophorone	1670	1130	68	58-97
90-12-0	1-Methylnaphthalene	1670	1330	80	55-93
91-57-6	2-Methylnaphthalene	1670	1280	77	57-103
88-74-4	2-Nitroaniline	1670	1290	77	53-106
99-09-2	3-Nitroaniline	1670	1040	62	29-85
100-01-6	4-Nitroaniline	1670	1250	75	49-104
91-20-3	Naphthalene	1670	1330	80	54-93
98-95-3	Nitrobenzene	1670	1250	75	53-92
62-75-9	N-Nitrosodimethylamine	1670	1040	62	37-88
621-64-7	N-Nitroso-di-n-propylamine	1670	1250	75	49-94
86-30-6	N-Nitrosodiphenylamine	1670	1380	83	53-107
85-01-8	Phenanthrene	2330	1820	78	61-103
129-00-0	Pyrene	2330	2010	86	58-109
110-86-1	Pyridine	1670	913	55	30-68
120-82-1	1,2,4-Trichlorobenzene	1670	1230	74	52-93

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-BS	T007332.D	1	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-1

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	68%	40-102%
4165-62-2	Phenol-d5	71%	41-100%
118-79-6	2,4,6-Tribromophenol	81%	42-108%
4165-60-0	Nitrobenzene-d5	72%	40-105%
321-60-8	2-Fluorobiphenyl	68%	43-107%
1718-51-0	Terphenyl-d14	92%	45-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46429-BS	T007364.D	1	04/15/13	FS	04/12/13	OP46429	ST358

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic Acid	3330	3140	94	36-118
95-57-8	2-Chlorophenol	1670	1320	79	48-104
59-50-7	4-Chloro-3-methyl phenol	1670	1580	95	52-108
120-83-2	2,4-Dichlorophenol	1670	1510	91	51-105
105-67-9	2,4-Dimethylphenol	1670	1460	88	43-96
51-28-5	2,4-Dinitrophenol	3330	2680	80	40-119
534-52-1	4,6-Dinitro-o-cresol	3330	2840	85	64-121
95-48-7	2-Methylphenol	1670	1360	82	46-107
	3&4-Methylphenol	3330	2780	83	44-111
88-75-5	2-Nitrophenol	1670	1460	88	49-104
100-02-7	4-Nitrophenol	3330	2810	84	56-116
87-86-5	Pentachlorophenol	3330	2730	82	61-114
108-95-2	Phenol	1670	1350	81	45-110
95-95-4	2,4,5-Trichlorophenol	1670	1350	81	58-112
88-06-2	2,4,6-Trichlorophenol	1670	1270	76	56-109
83-32-9	Acenaphthene	2330	1740	75	56-109
208-96-8	Acenaphthylene	1670	1310	79	56-106
62-53-3	Aniline	1670	1330	80	42-108
120-12-7	Anthracene	2330	1750	75	61-110
92-87-5	Benzidine	1670	521	31	10-109
56-55-3	Benzo(a)anthracene	2330	1820	78	66-111
50-32-8	Benzo(a)pyrene	2330	1740	75	59-104
205-99-2	Benzo(b)fluoranthene	2330	1880	81	67-113
191-24-2	Benzo(g,h,i)perylene	2330	1930	83	67-113
207-08-9	Benzo(k)fluoranthene	2330	1810	78	67-114
101-55-3	4-Bromophenyl phenyl ether	1670	1330	80	62-110
85-68-7	Butyl benzyl phthalate	1670	1360	82	65-113
100-51-6	Benzyl Alcohol	1670	1330	80	53-108
91-58-7	2-Chloronaphthalene	1670	1250	75	53-106
106-47-8	4-Chloroaniline	1670	1470	88	30-115
86-74-8	Carbazole	1670	1380	83	60-111
218-01-9	Chrysene	2330	1800	77	65-112
111-91-1	bis(2-Chloroethoxy)methane	1670	1440	86	48-105
111-44-4	bis(2-Chloroethyl)ether	1670	1270	76	46-103
108-60-1	bis(2-Chloroisopropyl)ether	1670	1040	62	40-110
7005-72-3	4-Chlorophenyl phenyl ether	1670	1290	77	58-106

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46429-BS	T007364.D	1	04/15/13	FS	04/12/13	OP46429	ST358

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	1670	1280	77	44-102
122-66-7	1,2-Diphenylhydrazine	1670	1320	79	58-112
541-73-1	1,3-Dichlorobenzene	1670	1250	75	42-100
106-46-7	1,4-Dichlorobenzene	1670	1260	76	40-106
121-14-2	2,4-Dinitrotoluene	1670	1380	83	59-109
606-20-2	2,6-Dinitrotoluene	1670	1370	82	61-107
91-94-1	3,3'-Dichlorobenzidine	1670	1370	82	36-114
53-70-3	Dibenzo(a,h)anthracene	2330	1980	85	68-115
132-64-9	Dibenzofuran	1670	1320	79	57-108
84-74-2	Di-n-butyl phthalate	1670	1360	82	63-108
117-84-0	Di-n-octyl phthalate	1670	1370	82	64-119
84-66-2	Diethyl phthalate	1670	1360	82	61-109
131-11-3	Dimethyl phthalate	1670	1330	80	59-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1360	82	64-115
206-44-0	Fluoranthene	1670	1360	82	60-108
86-73-7	Fluorene	2330	1760	75	58-109
118-74-1	Hexachlorobenzene	1670	1370	82	59-111
87-68-3	Hexachlorobutadiene	1670	1420	85	41-108
77-47-4	Hexachlorocyclopentadiene	1670	1140	68	49-110
67-72-1	Hexachloroethane	1670	1250	75	40-105
193-39-5	Indeno(1,2,3-cd)pyrene	2330	2020	87	66-116
78-59-1	Isophorone	1670	1260	76	42-89
90-12-0	1-Methylnaphthalene	1670	1510	91	49-106
91-57-6	2-Methylnaphthalene	1670	1490	89	47-106
88-74-4	2-Nitroaniline	1670	1380	83	56-123
99-09-2	3-Nitroaniline	1670	1280	77	41-111
100-01-6	4-Nitroaniline	1670	1440	86	54-113
91-20-3	Naphthalene	1670	1500	90	44-104
98-95-3	Nitrobenzene	1670	1440	86	43-108
62-75-9	N-Nitrosodimethylamine	1670	1100	66	40-106
621-64-7	N-Nitroso-di-n-propylamine	1670	1340	80	48-108
86-30-6	N-Nitrosodiphenylamine	1670	1290	77	62-110
85-01-8	Phenanthrene	2330	1770	76	63-111
129-00-0	Pyrene	2330	1740	75	65-115
110-86-1	Pyridine	1670	1120	67	31-102
120-82-1	1,2,4-Trichlorobenzene	1670	1410	85	45-100

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46429-BS	T007364.D	1	04/15/13	FS	04/12/13	OP46429	ST358

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	73%	40-102%
4165-62-2	Phenol-d5	80%	41-100%
118-79-6	2,4,6-Tribromophenol	81%	42-108%
4165-60-0	Nitrobenzene-d5	85%	40-105%
321-60-8	2-Fluorobiphenyl	71%	43-107%
1718-51-0	Terphenyl-d14	81%	45-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MS [a]	T007341.D	4	04/12/13	FS	04/12/13	OP46416	ST357
OP46416-MSD [a]	T007342.D	4	04/12/13	FS	04/12/13	OP46416	ST357
FA3550-2 [a]	T007340.D	4	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-1

CAS No.	Compound	FA3550-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	3500 U		3510	ND	0*	ND	0*	nc	36-118/41
95-57-8	2-Chlorophenol	700 U		1750	1070	61	984	56	8	48-104/26
59-50-7	4-Chloro-3-methyl phenol	700 U		1750	1250	71	1210	69	3	52-108/21
120-83-2	2,4-Dichlorophenol	700 U		1750	1220	70	1190	68	2	51-105/27
105-67-9	2,4-Dimethylphenol	700 U		1750	1230	70	1200	68	2	43-96/23
51-28-5	2,4-Dinitrophenol	3500 U		3510	ND	0*	ND	0*	nc	40-119/32
534-52-1	4,6-Dinitro-o-cresol	1400 U		3510	ND	0*	ND	0*	nc	64-121/29
95-48-7	2-Methylphenol	700 U		1750	1070	61	970	55	10	46-107/24
	3&4-Methylphenol	700 U		3510	2240	64	2020	57	10	44-111/24
88-75-5	2-Nitrophenol	700 U		1750	1040	59	880	50	17	49-104/27
100-02-7	4-Nitrophenol	3500 U		3510	2050	58	2090	59	2	56-116/23
87-86-5	Pentachlorophenol	3500 U		3510	1710	49*	1850	53*	8	61-114/23
108-95-2	Phenol	700 U		1750	1070	61	977	56	9	45-110/24
95-95-4	2,4,5-Trichlorophenol	700 U		1750	1140	65	1170	66	3	58-112/22
88-06-2	2,4,6-Trichlorophenol	700 U		1750	1110	63	1130	64	2	56-109/25
83-32-9	Acenaphthene	700 U		2460	1550	63	1510	61	3	56-109/23
208-96-8	Acenaphthylene	700 U		1750	1200	68	1180	67	2	56-106/23
62-53-3	Aniline	700 U		1750	954	54	848	48	12	42-108/28
120-12-7	Anthracene	700 U		2460	1640	67	1660	67	1	61-110/21
56-55-3	Benzo(a)anthracene	71.6	I	2460	1650	64*	1710	66	4	66-111/23
50-32-8	Benzo(a)pyrene	75.7	I	2460	1520	59	1590	61	5	59-104/23
205-99-2	Benzo(b)fluoranthene	88.5	I	2460	1850	72	1660	64*	11	67-113/24
191-24-2	Benzo(g,h,i)perylene	149	I	2460	1740	65*	1910	71	9	67-113/21
207-08-9	Benzo(k)fluoranthene	700 U		2460	1450	59*	1570	64*	8	67-114/22
101-55-3	4-Bromophenyl phenyl ether	700 U		1750	1280	73	1280	73	0	62-110/21
85-68-7	Butyl benzyl phthalate	700 U		1750	1260	72	1250	71	1	65-113/20
100-51-6	Benzyl Alcohol	700 U		1750	1150	66	979	56	16	53-108/24
91-58-7	2-Chloronaphthalene	700 U		1750	1120	64	1090	62	3	53-106/23
106-47-8	4-Chloroaniline	700 U		1750	1160	66	1090	62	6	30-115/30
86-74-8	Carbazole	700 U		1750	1160	66	1190	68	3	60-111/19
218-01-9	Chrysene	83.9	I	2460	1620	63*	1670	64*	3	65-112/25
111-91-1	bis(2-Chloroethoxy)methane	700 U		1750	1200	68	1130	64	6	48-105/24
111-44-4	bis(2-Chloroethyl)ether	700 U		1750	1020	58	911	52	11	46-103/27
108-60-1	bis(2-Chloroisopropyl)ether	700 U		1750	975	56	866	49	12	40-110/25
7005-72-3	4-Chlorophenyl phenyl ether	700 U		1750	1150	66	1160	66	1	58-106/21
95-50-1	1,2-Dichlorobenzene	700 U		1750	970	55	862	49	12	44-102/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MS [a]	T007341.D	4	04/12/13	FS	04/12/13	OP46416	ST357
OP46416-MSD [a]	T007342.D	4	04/12/13	FS	04/12/13	OP46416	ST357
FA3550-2 [a]	T007340.D	4	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-1

CAS No.	Compound	FA3550-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
122-66-7	1,2-Diphenylhydrazine	700 U		1750	1220	70	1240	70	2	58-112/22
541-73-1	1,3-Dichlorobenzene	700 U		1750	919	52	834	47	10	42-100/30
106-46-7	1,4-Dichlorobenzene	700 U		1750	955	54	863	49	10	40-106/29
121-14-2	2,4-Dinitrotoluene	700 U		1750	1050	60	963	55*	9	59-109/20
606-20-2	2,6-Dinitrotoluene	700 U		1750	1140	65	1070	61	6	61-107/22
91-94-1	3,3'-Dichlorobenzidine	700 U		1750	850	48	1090	62	25	36-114/28
53-70-3	Dibenzo(a,h)anthracene	700 U		2460	1690	69	1770	72	5	68-115/23
132-64-9	Dibenzofuran	700 U		1750	1150	66	1110	63	4	57-108/22
84-74-2	Di-n-butyl phthalate	1400 U		1750	1250	71	1280	73	2	63-108/19
117-84-0	Di-n-octyl phthalate	700 U		1750	1270	72	1200	68	6	64-119/21
84-66-2	Diethyl phthalate	1400 U		1750	1250	71	1230	70	2	61-109/20
131-11-3	Dimethyl phthalate	700 U		1750	1250	71	1210	69	3	59-108/20
117-81-7	bis(2-Ethylhexyl)phthalate	1400 U		1750	1280	73	1270	72	1	64-115/23
206-44-0	Fluoranthene	72.7	I	1750	1170	63	1180	63	1	60-108/25
86-73-7	Fluorene	700 U		2460	1550	63	1510	61	3	58-109/21
118-74-1	Hexachlorobenzene	700 U		1750	1110	63	1170	66	5	59-111/21
87-68-3	Hexachlorobutadiene	700 U		1750	1180	67	1110	63	6	41-108/27
77-47-4	Hexachlorocyclopentadiene	700 U		1750	405	23*	335	19*	19	49-110/31
67-72-1	Hexachloroethane	700 U		1750	899	51	800	45	12	40-105/32
193-39-5	Indeno(1,2,3-cd)pyrene	76.2	I	2460	1840	72	1990	78	8	66-116/22
78-59-1	Isophorone	700 U		1750	1030	59	978	56	5	42-89/22
90-12-0	1-Methylnaphthalene	700 U		1750	1280	73	1190	68	7	49-106/26
91-57-6	2-Methylnaphthalene	700 U		1750	1290	74	1150	65	11	47-106/27
88-74-4	2-Nitroaniline	700 U		1750	1240	71	1150	65	8	56-123/24
99-09-2	3-Nitroaniline	700 U		1750	1130	64	1170	66	3	41-111/25
100-01-6	4-Nitroaniline	700 U		1750	1030	59	1040	59	1	54-113/22
91-20-3	Naphthalene	700 U		1750	1270	72	1170	66	8	44-104/27
98-95-3	Nitrobenzene	700 U		1750	1180	67	1080	61	9	43-108/25
62-75-9	N-Nitrosodimethylamine	1400 U		1750	919	52	814	46	12	40-106/27
621-64-7	N-Nitroso-di-n-propylamine	700 U		1750	1090	62	959	54	13	48-108/27
86-30-6	N-Nitrosodiphenylamine	700 U		1750	1270	72	1300	74	2	62-110/21
85-01-8	Phenanthrene	700 U		2460	1630	66	1640	67	1	63-111/22
129-00-0	Pyrene	118	I	2460	1620	61*	1650	62*	2	65-115/25
110-86-1	Pyridine	1400 U		1750	691	39	687	39	1	31-102/38
120-82-1	1,2,4-Trichlorobenzene	700 U		1750	1150	66	1080	61	6	45-100/26

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46416-MS [a]	T007341.D	4	04/12/13	FS	04/12/13	OP46416	ST357
OP46416-MSD [a]	T007342.D	4	04/12/13	FS	04/12/13	OP46416	ST357
FA3550-2 [a]	T007340.D	4	04/12/13	FS	04/12/13	OP46416	ST357

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-1

CAS No.	Surrogate Recoveries	MS	MSD	FA3550-2	Limits
367-12-4	2-Fluorophenol	59%	53%	57%	40-102%
4165-62-2	Phenol-d5	62%	54%	59%	41-100%
118-79-6	2,4,6-Tribromophenol	63%	64%	65%	42-108%
4165-60-0	Nitrobenzene-d5	64%	57%	61%	40-105%
321-60-8	2-Fluorobiphenyl	63%	60%	62%	43-107%
1718-51-0	Terphenyl-d14	64%	65%	73%	45-119%

(a) Dilution required due to matrix interference; extract was viscous.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46429-MS	T007377.D	1	04/15/13	FS	04/12/13	OP46429	ST358
OP46429-MSD	T007378.D	1	04/15/13	FS	04/12/13	OP46429	ST358
FA3123-2R [a]	T007368.D	1	04/15/13	FS	04/12/13	OP46429	ST358

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Compound	FA3123-2R ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		3710	3700	100	3590	98	3	36-118/41
95-57-8	2-Chlorophenol	ND		1860	1570	85	1470	80	7	48-104/26
59-50-7	4-Chloro-3-methyl phenol	ND		1860	2020	109*	1890	103	7	52-108/21
120-83-2	2,4-Dichlorophenol	ND		1860	1860	100	1780	97	4	51-105/27
105-67-9	2,4-Dimethylphenol	ND		1860	1700	92	1660	90	2	43-96/23
51-28-5	2,4-Dinitrophenol	ND		3710	2650	71	2780	76	5	40-119/32
534-52-1	4,6-Dinitro-o-cresol	ND		3710	2770	75	2870	78	4	64-121/29
95-48-7	2-Methylphenol	ND		1860	1630	88	1520	83	7	46-107/24
	3&4-Methylphenol	ND		3710	3420	92	3240	88	5	44-111/24
88-75-5	2-Nitrophenol	ND		1860	1750	94	1630	89	7	49-104/27
100-02-7	4-Nitrophenol	ND		3710	3590	97	3390	92	6	56-116/23
87-86-5	Pentachlorophenol	ND		3710	3500	94	3420	93	2	61-114/23
108-95-2	Phenol	ND		1860	1620	87	1540	84	5	45-110/24
95-95-4	2,4,5-Trichlorophenol	ND		1860	1720	93	1630	89	5	58-112/22
88-06-2	2,4,6-Trichlorophenol	ND		1860	1620	87	1570	85	3	56-109/25
83-32-9	Acenaphthene	ND		2600	2240	86	2130	83	5	56-109/23
208-96-8	Acenaphthylene	ND		1860	1640	88	1570	85	4	56-106/23
62-53-3	Aniline	ND		1860	1400	75	1340	73	4	42-108/28
120-12-7	Anthracene	ND		2600	2220	85	2120	82	5	61-110/21
56-55-3	Benzo(a)anthracene	ND		2600	2310	89	2220	86	4	66-111/23
50-32-8	Benzo(a)pyrene	ND		2600	2190	84	2150	84	2	59-104/23
205-99-2	Benzo(b)fluoranthene	ND		2600	2640	102	2480	96	6	67-113/24
191-24-2	Benzo(g,h,i)perylene	ND		2600	2500	96	2380	93	5	67-113/21
207-08-9	Benzo(k)fluoranthene	ND		2600	2240	86	2160	84	4	67-114/22
101-55-3	4-Bromophenyl phenyl ether	ND		1860	1730	93	1640	89	5	62-110/21
85-68-7	Butyl benzyl phthalate	ND		1860	1700	92	1640	89	4	65-113/20
100-51-6	Benzyl Alcohol	ND		1860	1720	93	1600	87	7	53-108/24
91-58-7	2-Chloronaphthalene	ND		1860	1590	86	1500	82	6	53-106/23
106-47-8	4-Chloroaniline	ND		1860	1550	84	1500	82	3	30-115/30
86-74-8	Carbazole	ND		1860	1740	94	1650	90	5	60-111/19
218-01-9	Chrysene	ND		2600	2270	87	2190	85	4	65-112/25
111-91-1	bis(2-Chloroethoxy)methane	ND		1860	1770	95	1670	91	6	48-105/24
111-44-4	bis(2-Chloroethyl)ether	ND		1860	1550	84	1430	78	8	46-103/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		1860	1280	69	1170	64	9	40-110/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		1860	1660	89	1580	86	5	58-106/21
95-50-1	1,2-Dichlorobenzene	ND		1860	1520	82	1400	76	8	44-102/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46429-MS	T007377.D	1	04/15/13	FS	04/12/13	OP46429	ST358
OP46429-MSD	T007378.D	1	04/15/13	FS	04/12/13	OP46429	ST358
FA3123-2R [a]	T007368.D	1	04/15/13	FS	04/12/13	OP46429	ST358

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Compound	FA3123-2R ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
122-66-7	1,2-Diphenylhydrazine	ND		1860	1720	93	1640	89	5	58-112/22
541-73-1	1,3-Dichlorobenzene	ND		1860	1460	79	1360	74	7	42-100/30
106-46-7	1,4-Dichlorobenzene	ND		1860	1490	80	1390	76	7	40-106/29
121-14-2	2,4-Dinitrotoluene	ND		1860	1670	90	1620	88	3	59-109/20
606-20-2	2,6-Dinitrotoluene	ND		1860	1710	92	1650	90	4	61-107/22
91-94-1	3,3'-Dichlorobenzidine	ND		1860	891	48	1060	58	17	36-114/28
53-70-3	Dibenzo(a,h)anthracene	ND		2600	2620	101	2500	97	5	68-115/23
132-64-9	Dibenzofuran	ND		1860	1670	90	1570	85	6	57-108/22
84-74-2	Di-n-butyl phthalate	ND		1860	1740	94	1680	91	4	63-108/19
117-84-0	Di-n-octyl phthalate	ND		1860	1790	96	1740	95	3	64-119/21
84-66-2	Diethyl phthalate	ND		1860	1770	95	1680	91	5	61-109/20
131-11-3	Dimethyl phthalate	ND		1860	1710	92	1650	90	4	59-108/20
117-81-7	bis(2-Ethylhexyl)phthalate	38.5	J	1860	1710	90	1690	90	1	64-115/23
206-44-0	Fluoranthene	ND		1860	1730	93	1670	91	4	60-108/25
86-73-7	Fluorene	ND		2600	2280	88	2170	84	5	58-109/21
118-74-1	Hexachlorobenzene	ND		1860	1740	94	1660	90	5	59-111/21
87-68-3	Hexachlorobutadiene	ND		1860	1700	92	1610	88	5	41-108/27
77-47-4	Hexachlorocyclopentadiene	ND		1860	1350	73	1240	67	8	49-110/31
67-72-1	Hexachloroethane	ND		1860	1500	81	1370	75	9	40-105/32
193-39-5	Indeno(1,2,3-cd)pyrene	ND		2600	2650	102	2550	99	4	66-116/22
78-59-1	Isophorone	ND		1860	1530	82	1450	79	5	42-89/22
90-12-0	1-Methylnaphthalene	ND		1860	1900	102	1740	95	9	49-106/26
91-57-6	2-Methylnaphthalene	ND		1860	1810	98	1680	91	7	47-106/27
88-74-4	2-Nitroaniline	ND		1860	1730	93	1620	88	7	56-123/24
99-09-2	3-Nitroaniline	ND		1860	1480	80	1460	79	1	41-111/25
100-01-6	4-Nitroaniline	ND		1860	1510	81	1560	85	3	54-113/22
91-20-3	Naphthalene	ND		1860	1830	99	1700	93	7	44-104/27
98-95-3	Nitrobenzene	ND		1860	1730	93	1590	87	8	43-108/25
62-75-9	N-Nitrosodimethylamine	ND		1860	1340	72	1210	66	10	40-106/27
621-64-7	N-Nitroso-di-n-propylamine	ND		1860	1630	88	1540	84	6	48-108/27
86-30-6	N-Nitrosodiphenylamine	ND		1860	1650	89	1580	86	4	62-110/21
85-01-8	Phenanthrene	ND		2600	2270	87	2180	85	4	63-111/22
129-00-0	Pyrene	ND		2600	2200	85	2120	82	4	65-115/25
110-86-1	Pyridine	ND		1860	1340	72	1240	67	8	31-102/38
120-82-1	1,2,4-Trichlorobenzene	ND		1860	1700	92	1580	86	7	45-100/26

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46429-MS	T007377.D	1	04/15/13	FS	04/12/13	OP46429	ST358
OP46429-MSD	T007378.D	1	04/15/13	FS	04/12/13	OP46429	ST358
FA3123-2R [a]	T007368.D	1	04/15/13	FS	04/12/13	OP46429	ST358

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Surrogate Recoveries	MS	MSD	FA3123-2R	Limits
367-12-4	2-Fluorophenol	76%	72%		40-102%
4165-62-2	Phenol-d5	86%	82%		41-100%
118-79-6	2,4,6-Tribromophenol	91%	88%		42-108%
4165-60-0	Nitrobenzene-d5	89%	82%	81%	40-105%
321-60-8	2-Fluorobiphenyl	79%	75%	76%	43-107%
1718-51-0	Terphenyl-d14	90%	86%	87%	45-119%

(a) Sample extracted beyond hold time.

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR3259-MB	QR075992.D	1	04/16/13	MM	n/a	n/a	GQR3259

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3561-1, FA3561-2, FA3561-3, FA3561-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	101%	56-149%
98-08-8	aaa-Trifluorotoluene	95%	66-132%

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR3260-MB	QR076028.D	1	04/17/13	MM	n/a	n/a	GQR3260

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3561-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	99%	56-149%
98-08-8	aaa-Trifluorotoluene	96%	66-132%

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR3259-BS	QR075991.D	1	04/16/13	MM	n/a	n/a	GQR3259

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3561-1, FA3561-2, FA3561-3, FA3561-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	18.9	95	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	101%	56-149%
98-08-8	aaa-Trifluorotoluene	90%	66-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR3260-BS	QR076027.D	1	04/17/13	MM	n/a	n/a	GQR3260

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3561-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	19.1	96	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	109%	56-149%
98-08-8	aaa-Trifluorotoluene	97%	66-132%

8.2.2

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* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3604-4MS	QR075999.D	1	04/16/13	MM	n/a	n/a	GQR3259
FA3604-4MSD	QR076000.D	1	04/16/13	MM	n/a	n/a	GQR3259
FA3604-4 [a]	QR075996.D	1	04/16/13	MM	n/a	n/a	GQR3259

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3561-1, FA3561-2, FA3561-3, FA3561-5

CAS No.	Compound	FA3604-4 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	6.29		16.6	20.0	83	22.0	95	10	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA3604-4	Limits
460-00-4	4-Bromofluorobenzene	108%	116%	141%	56-149%
98-08-8	aaa-Trifluorotoluene	86%	85%	97%	66-132%

(a) Confirmation run.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3561-4MS	QR076035.D	1	04/17/13	MM	n/a	n/a	GQR3260
FA3561-4MSD	QR076036.D	1	04/17/13	MM	n/a	n/a	GQR3260
FA3561-4	QR076034.D	1	04/17/13	MM	n/a	n/a	GQR3260

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3561-4

CAS No.	Compound	FA3561-4 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	33.1		24.9	53.9	83	54.7	87	1	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA3561-4	Limits
460-00-4	4-Bromofluorobenzene	122%	125%	124%	56-149%
98-08-8	aaa-Trifluorotoluene	112%	113%	121%	66-132%

8.3.2

8

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46431-MB	YY36297.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	8.3	3.3	mg/kg	
	TPH (> C22-C36)	ND	8.3	3.3	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	82%	56-122%

Blank Spike Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46431-BS	YY36296.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C22)	33.3	28.5	86	65-116
	TPH (> C22-C36)	33.3	35.7	107	51-148

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	87%	56-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3561
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46431-MS	YY36309.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330
OP46431-MSD	YY36310.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330
FA3526-2	YY36308.D	1	04/18/13	SJL	04/12/13	OP46431	GYY1330

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3561-1, FA3561-2, FA3561-3, FA3561-4, FA3561-5

CAS No.	Compound	FA3526-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	ND		40	22.4	56*	28.8	72	25	65-116/28
	TPH (> C22-C36)	ND		40	25.6	64	37.0	93	36*	51-148/28

CAS No.	Surrogate Recoveries	MS	MSD	FA3526-2	Limits
84-15-1	o-Terphenyl	53%*	73%	72%	56-122%

9.3.1

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

06/26/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

910033

Accutest Job Number: FA3562

Sampling Dates: 04/09/13 - 04/10/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **193**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), AK, AR, GA, KY, MA, NV, OK, UT, VA, WA, WI

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Accutest LabLink@143056 11:19 26-Jun-2013

Sample Summary

Bhate Environmental

Job No: FA3562

Holloman AFB; SS61 VCM
Project No: 910033

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA3562-1	04/09/13	16:00	DMTL	04/11/13	AQ	Ground Water	SS61-MW30
FA3562-1F	04/09/13	16:00	DMTL	04/11/13	AQ	Ground Water	SS61-MW30
FA3562-2	04/09/13	00:00	DMTL	04/11/13	AQ	Trip Blank Water	TRIP BLANK
FA3562-3	04/09/13	16:00	DMTL	04/11/13	AQ	Ground Water	SS61-MW30-A
FA3562-3F	04/09/13	16:00	DMTL	04/11/13	AQ	Ground Water	SS61-MW30-A
FA3562-4	04/09/13	00:00	DMTL	04/11/13	AQ	Trip Blank Water	TRIP BLANK
FA3562-5	04/09/13	17:25	DMTL	04/11/13	AQ	Ground Water	SS61-MW29
FA3562-5F	04/09/13	17:25	DMTL	04/11/13	AQ	Ground Water	SS61-MW29
FA3562-6	04/09/13	00:00	DMTL	04/11/13	AQ	Trip Blank Water	TRIP BLANK
FA3562-7	04/10/13	08:40	DMTL	04/11/13	AQ	Ground Water	SS61-MW27
FA3562-7F	04/10/13	08:40	DMTL	04/11/13	AQ	Ground Water	SS61-MW27
FA3562-8	04/10/13	00:00	DMTL	04/11/13	AQ	Trip Blank Water	TRIP BLANK
FA3562-9	04/10/13	08:45	DMTL	04/11/13	AQ	Ground Water	SS61-MW31

Accutest LabLink@143056 11:19 26-Jun-2013

Sample Summary
(continued)

Bhate Environmental

Job No: FA3562

Holloman AFB; SS61 VCM
Project No: 910033

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA3562-9F	04/10/13	08:45	DMTL	04/11/13	AQ	Ground Water	SS61-MW31
FA3562-10	04/10/13	00:00	DMTL	04/11/13	AQ	Trip Blank Water	TRIP BLANK
FA3562-11	04/10/13	10:20	DMTL	04/11/13	AQ	Ground Water	SS61-MW28
FA3562-11F	04/10/13	10:20	DMTL	04/11/13	AQ	Ground Water	SS61-MW28
FA3562-12	04/10/13	00:00	DMTL	04/11/13	AQ	Trip Blank Water	TRIP BLANK
FA3562-13	04/10/13	10:25	DMTL	04/11/13	AQ	Ground Water	SS61-MW25
FA3562-13F	04/10/13	10:25	DMTL	04/11/13	AQ	Ground Water	SS61-MW25
FA3562-14	04/10/13	00:00	DMTL	04/11/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA3562

Site: Holloman AFB; SS61 VCM **Report Date** 4/26/2013 10:51:32 PM

7 Samples and 7 Trip Blanks were collected between 04/09/2013 and 04/10/2013 and were received at Accutest SE on 04/11/2013 properly preserved, at 1.6 Deg. C and intact. These Samples received an Accutest job number of FA3562. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VB3691

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3803-1MS, FA3803-1MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** VB3692

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3903-2MS, FA3903-2MSD were used as the QC samples indicated.

RPD(s) for MSD for Chloroethane are outside control limits for sample FA3903-2MSD. Probable cause is due to sample non-homogeneity.

FA3562-12: Sample was not preserved to a pH < 2; reported results are considered minimum values.

FA3562-4: Confirmation run.

Matrix: AQ **Batch ID:** VB3693

FA3562-6: Confirmation run.

Matrix: AQ **Batch ID:** VI43

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3562-5MS, FA3562-5MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for 2-Hexanone, Acetone are outside control limits. Blank Spike recoveries are biased high. Analytes are non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, 2-Hexanone, 4-Methyl-2-pentanone are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, 2-Hexanone, 4-Methyl-2-pentanone, Carbon disulfide, cis-1,3-Dichloropropene, Dibromochloromethane, Styrene, trans-1,3-Dichloropropene are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for Bromoform, Carbon disulfide, cis-1,3-Dichloropropene, Dibromochloromethane, Styrene, trans-1,3-Dichloropropene are outside control limits for sample FA3562-5MSD. Probable cause is due to sample non-homogeneity.

FA3562-4 for 2-Hexanone: Associated BS recovery outside control limits.

FA3562-4 for Acetone: Associated BS recovery outside control limits.

FA3562-5 for 2-Hexanone: Associated BS recovery outside control limits.

FA3562-5 for Acetone: Associated BS recovery outside control limits.

FA3562-6 for 2-Hexanone: Associated BS recovery outside control limits.

FA3562-6 for Acetone: Associated BS recovery outside control limits.

FA3562-7 for 2-Hexanone: Associated BS recovery outside control limits.

FA3562-7 for Acetone: Associated BS recovery outside control limits.

FA3562-8 for 2-Hexanone: Associated BS recovery outside control limits.

FA3562-8 for Acetone: Associated BS recovery outside control limits.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VI43

FA3562-9 for 2-Hexanone: Associated BS recovery outside control limits.

FA3562-10 for 2-Hexanone: Associated BS recovery outside control limits.

FA3562-10 for Acetone: Associated BS recovery outside control limits.

FA3562-11 for 2-Hexanone: Associated BS recovery outside control limits.

FA3562-12 for 2-Hexanone: Associated BS recovery outside control limits.

FA3562-12 for Acetone: Associated BS recovery outside control limits.

FA3562-13 for 2-Hexanone: Associated BS recovery outside control limits.

FA3562-13 for Acetone: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VM2755

All method blanks for this batch meet method specific criteria.

Sample(s) FA3802-1MS, FA3802-1MSD were used as the QC samples indicated.

The following samples were run outside of holding time for method SW846 8260B: FA3562-11. Sample re-analyzed beyond hold time; reported results are considered minimum values.

Matrix Spike Recovery(s) for Acetone are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix: AQ **Batch ID:** VP598

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3438-5MS, FA3438-5MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acetone are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for Bromoform, Dibromochloromethane are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Bromoform, Carbon disulfide, cis-1,3-Dichloropropene, Dibromochloromethane are outside control limits. Probable cause is due to matrix interference.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for Benzene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

FA3562-1 for Acetone: Associated BS recovery outside control limits.

FA3562-2 for Acetone: Associated BS recovery outside control limits.

FA3562-3 for Acetone: Associated BS recovery outside control limits.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP46423

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3562-3MS, FA3562-3MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4-Nitroaniline, Benzidine, Nitrobenzene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4-Nitroaniline, 4-Nitrophenol, Benzidine, Nitrobenzene, Phenol are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for 3-Nitroaniline are outside control limits for sample OP46423-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) OP46423-MS, OP46423-MSD have surrogates outside control limits. Probable cause is due to matrix interference.

FA3562-13: Dilution required due to matrix interference.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD4961

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3572-1MS, FA3572-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP46449

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3615-5MS, FA3615-5MSD were used as the QC samples indicated.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP24990

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3562-1DUP, FA3562-1MS, FA3562-1MSD, FA3562-1PS, FA3562-1SDL were used as the QC samples for metals.

MP24990-PS1 for Manganese: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP21438

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3557-4MS, FA3557-4MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA3562-1 for Nitrogen, Nitrate: Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.

FA3562-3 for Nitrogen, Nitrate: Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.

FA3562-5 for Nitrogen, Nitrate: Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.

FA3562-7 for Nitrogen, Nitrate: Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.

Matrix: AQ **Batch ID:** GP21455

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3620-1MS, FA3620-1MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA3562-9 for Nitrogen, Nitrate: Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.

FA3562-11 for Nitrogen, Nitrate: Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.

FA3562-13 for Nitrogen, Nitrate: Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP21485

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3568-1MS, FA3568-1MSD were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP21449

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3562-1MS, FA3562-1MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN55190

All method blanks for this batch meet method specific criteria.

Sample(s) FA3562-1DUP was used as the QC samples for Iron, Ferrous.

FA3562-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA3562-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA3562-5 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA3562-7 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA3562-9 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA3562-11 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA3562-13 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R30221

FA3562-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R30222

FA3562-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R30223

FA3562-5 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R30224

FA3562-7 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R30229

FA3562-9 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R30230

FA3562-11 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R30231

FA3562-13 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN55290

All method blanks for this batch meet method specific criteria.

Sample(s) FA3629-17DUP was used as the QC samples for Solids, Total Dissolved.

The following samples were run outside of holding time for method SM19 2540C: FA3562-1, FA3562-3. Samples analyzed beyond hold time due to laboratory error.

Matrix: AQ **Batch ID:** GN55315

All method blanks for this batch meet method specific criteria.

Sample(s) FA3598-1DUP was used as the QC samples for Solids, Total Dissolved.

The following samples were run outside of holding time for method SM19 2540C: FA3562-11, FA3562-13, FA3562-5, FA3562-7, FA3562-9. Samples analyzed beyond hold time due to laboratory error.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP21442

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3562-1DUP, FA3562-1MS were used as the QC samples for BOD, 5 Day.

Blank Spike Recovery(s) for BOD, 5 Day are outside control limits.

GP21442-S2 for BOD, 5 Day: Oxygen depletion outside of method acceptance criteria at the dilutions analyzed.

Matrix: AQ **Batch ID:** GP21443

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3562-11MS, FA3562-11DUP were used as the QC samples for BOD, 5 Day.

Blank Spike Recovery(s) for BOD, 5 Day are outside control limits.

RPD(s) for Duplicate for BOD, 5 Day are outside control limits for sample GP21443-D1. RPD acceptable due to low duplicate and sample concentrations.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP21467

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3447-13MS, FA3447-13MSD were used as the QC samples for Chemical Oxygen Demand.

Matrix: AQ **Batch ID:** GP21474

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3566-3MS, FA3566-3MSD were used as the QC samples for Chemical Oxygen Demand.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: April 26, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA3562
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/09/13 thru 04/10/13

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA3562-1	**SS61-MW30**					
Chloroform		0.43 J	1.0	0.26	ug/l	SW846 8260B
1,2-Dichloroethane		27.8	1.0	0.22	ug/l	SW846 8260B
TPH (> C22-C36)		0.0986 J	0.24	0.096	mg/l	SW846 8015C
Iron		462	300	29	ug/l	EPA 200.7
Manganese		782	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		5.7	4.0	2.0	mg/l	SM19 5210B
Chemical Oxygen Demand		19.8 J	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.35 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.11	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Nitrate [c]		7.2 J	10	5.0	mg/l	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl		3.8	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved [d]		12400	1000	100	mg/l	SM19 2540C
Sulfate		5380	200	60	mg/l	EPA 300/SW846 9056A
FA3562-1F	**SS61-MW30**					
Manganese		907	15	0.70	ug/l	EPA 200.7
FA3562-2	**TRIP BLANK**					
Toluene		0.61 J	1.0	0.20	ug/l	SW846 8260B
FA3562-3	**SS61-MW30-A**					
tert-Butylbenzene		0.34 J	1.0	0.29	ug/l	SW846 8260B
Chloroform		0.33 J	1.0	0.26	ug/l	SW846 8260B
1,2-Dichloroethane		27.2	1.0	0.22	ug/l	SW846 8260B
Iron		840	300	29	ug/l	EPA 200.7
Manganese		1210	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		118	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.41	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.43	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Nitrate [c]		7.0 J	10	5.0	mg/l	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl		3.8	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved [d]		14900	1000	100	mg/l	SM19 2540C
Sulfate		5080	200	60	mg/l	EPA 300/SW846 9056A
FA3562-3F	**SS61-MW30-A**					
Manganese		1370	15	0.70	ug/l	EPA 200.7

Summary of Hits

Job Number: FA3562
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/09/13 thru 04/10/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA3562-4	**TRIP BLANK**					
Methylene chloride		2.6 J	5.0	2.0	ug/l	SW846 8260B
Toluene		0.26 J	1.0	0.20	ug/l	SW846 8260B
FA3562-5	**SS61-MW29**					
1,2-Dichloroethane		2.2	1.0	0.22	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.0509 J	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		0.262	0.26	0.10	mg/l	SW846 8015C
Iron		400	300	29	ug/l	EPA 200.7
Manganese		322	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		9.9 J	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.13 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.27	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		3.5	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved [d]		15000	1000	100	mg/l	SM19 2540C
Sulfate		6150	200	60	mg/l	EPA 300/SW846 9056A
FA3562-5F	**SS61-MW29**					
Manganese		316	15	0.70	ug/l	EPA 200.7
FA3562-6	**TRIP BLANK**					
Toluene		0.22 J	1.0	0.20	ug/l	SW846 8260B
FA3562-7	**SS61-MW27**					
Benzene		0.30 J	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		10.2	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		1.1	1.0	0.22	ug/l	SW846 8260B
m-Dichlorobenzene		0.41 J	1.0	0.25	ug/l	SW846 8260B
o-Dichlorobenzene		1.0	1.0	0.22	ug/l	SW846 8260B
p-Dichlorobenzene		0.40 J	1.0	0.20	ug/l	SW846 8260B
Fluoranthene		0.90 J	4.8	0.56	ug/l	SW846 8270D
TPH-GRO (C6-C10)		0.460	0.20	0.10	mg/l	SW846 8015C
TPH (C10-C22)		0.281	0.25	0.098	mg/l	SW846 8015C
Iron		2480	300	29	ug/l	EPA 200.7
Manganese		2000	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		14.8 J	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		2.3	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.22	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		3.2	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved [d]		5490	500	50	mg/l	SM19 2540C

Summary of Hits

Job Number: FA3562
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/09/13 thru 04/10/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Sulfate		2980	100	30	mg/l	EPA 300/SW846 9056A
FA3562-7F	**SS61-MW27**					
Manganese		2090	15	0.70	ug/l	EPA 200.7
FA3562-8	**TRIP BLANK**					
Methylene chloride		2.1 J	5.0	2.0	ug/l	SW846 8260B
FA3562-9	**SS61-MW31**					
sec-Butylbenzene		0.25 J	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		0.92 J	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		1.1	1.0	0.22	ug/l	SW846 8260B
Isopropylbenzene		14.1	1.0	0.20	ug/l	SW846 8260B
4-Methyl-2-pentanone		2.4 J	5.0	2.3	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.343	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		7.71	2.5	1.0	mg/l	SW846 8015C
Iron		1930	300	29	ug/l	EPA 200.7
Manganese		584	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		213	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		1.1	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.84	0.10	0.030	mg/l	SM18 3500FED
Solids, Total Dissolved [d]		17300	2000	200	mg/l	SM19 2540C
Sulfate		5580	400	120	mg/l	EPA 300/SW846 9056A
FA3562-9F	**SS61-MW31**					
Manganese		338	15	0.70	ug/l	EPA 200.7
FA3562-10	**TRIP BLANK**					
Toluene		0.28 J	1.0	0.20	ug/l	SW846 8260B
FA3562-11	**SS61-MW28**					
tert-Butylbenzene		1.0	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		0.89 J	1.0	0.22	ug/l	SW846 8260B
Isopropylbenzene		11.1	1.0	0.20	ug/l	SW846 8260B
Toluene		0.23 J	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.263	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		6.05	2.8	1.1	mg/l	SW846 8015C
Iron		523	300	29	ug/l	EPA 200.7
Manganese		475	15	0.70	ug/l	EPA 200.7

Summary of Hits

Job Number: FA3562
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/09/13 thru 04/10/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
BOD, 5 Day		2.2 J	13	2.0	mg/l	SM19 5210B
Chemical Oxygen Demand		42.0	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.13 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.39	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		3.1	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved [d]		8700	1000	100	mg/l	SM19 2540C
Sulfate		5410	200	60	mg/l	EPA 300/SW846 9056A
FA3562-11F	**SS61-MW28**					
Manganese		479	15	0.70	ug/l	EPA 200.7
FA3562-12	**TRIP BLANK**					
Methylene chloride		2.8 J	5.0	2.0	ug/l	SW846 8260B
FA3562-13	**SS61-MW25**					
Benzene		3460	100	21	ug/l	SW846 8260B
sec-Butylbenzene		6.8	5.0	1.1	ug/l	SW846 8260B
tert-Butylbenzene		7.7	5.0	1.5	ug/l	SW846 8260B
Chlorobenzene		9.9	5.0	1.0	ug/l	SW846 8260B
1,1-Dichloroethane		2.9 J	5.0	1.1	ug/l	SW846 8260B
1,2-Dichloroethane		2.0 J	5.0	1.1	ug/l	SW846 8260B
m-Dichlorobenzene		49.8	5.0	1.3	ug/l	SW846 8260B
o-Dichlorobenzene		185	5.0	1.1	ug/l	SW846 8260B
p-Dichlorobenzene		66.8	5.0	1.0	ug/l	SW846 8260B
Ethylbenzene		94.6	5.0	1.5	ug/l	SW846 8260B
Isopropylbenzene		1290	100	20	ug/l	SW846 8260B
n-Propylbenzene		37.5	5.0	1.1	ug/l	SW846 8260B
Toluene		1.9 J	5.0	1.0	ug/l	SW846 8260B
m,p-Xylene		3.1 J	10	1.5	ug/l	SW846 8260B
1,2-Dichlorobenzene [e]		187	19	2.6	ug/l	SW846 8270D
1,3-Dichlorobenzene [e]		55.6	19	3.0	ug/l	SW846 8270D
1,4-Dichlorobenzene [e]		79.0	19	2.7	ug/l	SW846 8270D
TPH-GRO (C6-C10)		8.85	1.0	0.50	mg/l	SW846 8015C
TPH (C10-C22)		1.90	1.0	0.40	mg/l	SW846 8015C
Iron		1140	300	29	ug/l	EPA 200.7
Manganese		632	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		16.6	6.0	2.0	mg/l	SM19 5210B
Chemical Oxygen Demand		54.3	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		15.0	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [a]		0.17 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.97	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.094 J	0.10	0.030	mg/l	EPA 350.1

Summary of Hits

Job Number: FA3562
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/09/13 thru 04/10/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Nitrogen, Total Kjeldahl		2.6	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved [d]		6010	500	50	mg/l	SM19 2540C
Sulfate		3810	100	30	mg/l	EPA 300/SW846 9056A
FA3562-13F	**SS61-MW25**					
Manganese		648	15	0.70	ug/l	EPA 200.7
FA3562-14	**TRIP BLANK**					
Toluene		0.28 J	1.0	0.20	ug/l	SW846 8260B

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.
(e) Dilution required due to matrix interference.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P15526.D	1	04/22/13	EG	n/a	n/a	VP598
Run #2	B090176.D	1	04/23/13	WV	n/a	n/a	VB3691

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	0.43	1.0	0.26	ug/l	J
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND [b]	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	27.8	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND [b]	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	92%	79-125%
2037-26-5	Toluene-D8	99%	100%	85-112%
460-00-4	4-Bromofluorobenzene	105%	100%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X027941.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	49	9.8	ug/l	
95-57-8	2-Chlorophenol	ND	4.9	0.69	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.9	0.79	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.9	0.69	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.9	0.75	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.8	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.9	0.71	ug/l	
	3&4-Methylphenol	ND	4.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	4.9	0.66	ug/l	
100-02-7	4-Nitrophenol	ND	25	4.9	ug/l	
87-86-5	Pentachlorophenol	ND	25	4.9	ug/l	
108-95-2	Phenol	ND	4.9	0.54	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.9	0.88	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.9	0.76	ug/l	
83-32-9	Acenaphthene	ND	4.9	0.69	ug/l	
208-96-8	Acenaphthylene	ND	4.9	0.68	ug/l	
62-53-3	Aniline	ND	4.9	0.76	ug/l	
120-12-7	Anthracene	ND	4.9	0.73	ug/l	
92-87-5	Benzidine	ND	25	4.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	0.54	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	0.56	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	0.74	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	0.65	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	0.65	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.9	0.77	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.9	0.70	ug/l	
100-51-6	Benzyl Alcohol	ND	4.9	0.98	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.9	0.71	ug/l	
106-47-8	4-Chloroaniline	ND	4.9	0.67	ug/l	
86-74-8	Carbazole	ND	4.9	0.51	ug/l	
218-01-9	Chrysene	ND	4.9	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.9	0.68	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.9	0.70	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.9	0.77	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.9	0.85	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.9	0.67	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.9	0.63	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.9	0.76	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.9	0.68	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.9	0.67	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.9	0.79	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.9	0.72	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	0.57	ug/l	
132-64-9	Dibenzofuran	ND	4.9	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.9	0.98	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.9	0.98	ug/l	
84-66-2	Diethyl phthalate	ND	4.9	0.98	ug/l	
131-11-3	Dimethyl phthalate	ND	4.9	0.79	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.9	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.9	0.58	ug/l	
86-73-7	Fluorene	ND	4.9	0.75	ug/l	
118-74-1	Hexachlorobenzene	ND	4.9	0.67	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.9	0.94	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.9	0.78	ug/l	
67-72-1	Hexachloroethane	ND	4.9	0.73	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	0.56	ug/l	
78-59-1	Isophorone	ND	4.9	0.63	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	0.69	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	0.67	ug/l	
88-74-4	2-Nitroaniline	ND	4.9	0.74	ug/l	
99-09-2	3-Nitroaniline	ND	4.9	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.9	0.95	ug/l	
91-20-3	Naphthalene	ND	4.9	0.62	ug/l	
98-95-3	Nitrobenzene	ND	4.9	0.71	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.9	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.9	0.83	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.9	0.98	ug/l	
85-01-8	Phenanthrene	ND	4.9	0.69	ug/l	
129-00-0	Pyrene	ND	4.9	0.67	ug/l	
110-86-1	Pyridine	ND	9.8	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.60	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	33%		14-67%
4165-62-2	Phenol-d5	29%		10-50%
118-79-6	2,4,6-Tribromophenol	76%		33-118%
4165-60-0	Nitrobenzene-d5	66%		42-108%
321-60-8	2-Fluorobiphenyl	65%		40-106%
1718-51-0	Terphenyl-d14	79%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121511.D	1	04/12/13	CP	n/a	n/a	GCD4961
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		70-131%
98-08-8	aaa-Trifluorotoluene	89%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47647.D	1	04/18/13	SJL	04/15/13	OP46449	GLL1799
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.24	0.096	mg/l	
	TPH (> C22-C36)	0.0986	0.24	0.096	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	462	300	29	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	782	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	5.7	4.0	2.0	mg/l	2	04/11/13 08:45	MG	SM19 5210B
Chemical Oxygen Demand	19.8 J	20	5.3	mg/l	1	04/16/13 11:45	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	04/12/13 09:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.35 J	0.40	0.059	mg/l	1	04/22/13 09:53	LM	SM18 3500FED M
Iron, Ferrous [b]	0.11	0.10	0.030	mg/l	1	04/11/13 13:35	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	04/18/13 13:30	VK	EPA 350.1
Nitrogen, Nitrate [c]	7.2 J	10	5.0	mg/l	100	04/12/13 20:37	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	3.8	0.53	0.17	mg/l	1	04/17/13 10:04	MG	EPA 351.2
Solids, Total Dissolved [d]	12400	1000	100	mg/l	10	04/17/13	KC	SM19 2540C
Sulfate	5380	200	60	mg/l	100	04/12/13 20:37	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA3562-1F	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	907	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-2	**Date Sampled:**	04/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P15509.D	1	04/22/13	EG	n/a	n/a	VP598
Run #2	B090177.D	1	04/23/13	WV	n/a	n/a	VB3691

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND [b]	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-2	**Date Sampled:**	04/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND [b]	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.61	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-2	**Date Sampled:**	04/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	91%	79-125%
2037-26-5	Toluene-D8	100%	102%	85-112%
460-00-4	4-Bromofluorobenzene	103%	99%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P15527.D	1	04/22/13	EG	n/a	n/a	VP598
Run #2	B090178.D	1	04/23/13	WV	n/a	n/a	VB3691

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.34	1.0	0.29	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	0.33	1.0	0.26	ug/l	J
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND [b]	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	27.2	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND [b]	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	107%	85%	79-125%
2037-26-5	Toluene-D8	100%	104%	85-112%
460-00-4	4-Bromofluorobenzene	104%	104%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X027942.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	49	9.7	ug/l	
95-57-8	2-Chlorophenol	ND	4.9	0.69	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.9	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.9	0.68	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.9	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.9	0.70	ug/l	
	3&4-Methylphenol	ND	4.9	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.9	0.66	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.9	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.9	ug/l	
108-95-2	Phenol	ND	4.9	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.9	0.87	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.9	0.76	ug/l	
83-32-9	Acenaphthene	ND	4.9	0.68	ug/l	
208-96-8	Acenaphthylene	ND	4.9	0.67	ug/l	
62-53-3	Aniline	ND	4.9	0.76	ug/l	
120-12-7	Anthracene	ND	4.9	0.73	ug/l	
92-87-5	Benzidine	ND	24	4.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	0.53	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	0.65	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.9	0.77	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.9	0.69	ug/l	
100-51-6	Benzyl Alcohol	ND	4.9	0.97	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.9	0.71	ug/l	
106-47-8	4-Chloroaniline	ND	4.9	0.67	ug/l	
86-74-8	Carbazole	ND	4.9	0.51	ug/l	
218-01-9	Chrysene	ND	4.9	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.9	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.9	0.70	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.9	0.77	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.9	0.85	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.9	0.66	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.9	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.9	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.9	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.9	0.67	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.9	0.78	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.9	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	0.57	ug/l	
132-64-9	Dibenzofuran	ND	4.9	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.9	0.97	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.9	0.97	ug/l	
84-66-2	Diethyl phthalate	ND	4.9	0.97	ug/l	
131-11-3	Dimethyl phthalate	ND	4.9	0.78	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.9	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.9	0.57	ug/l	
86-73-7	Fluorene	ND	4.9	0.74	ug/l	
118-74-1	Hexachlorobenzene	ND	4.9	0.67	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.9	0.93	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.9	0.77	ug/l	
67-72-1	Hexachloroethane	ND	4.9	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	0.56	ug/l	
78-59-1	Isophorone	ND	4.9	0.62	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	0.67	ug/l	
88-74-4	2-Nitroaniline	ND	4.9	0.73	ug/l	
99-09-2	3-Nitroaniline	ND	4.9	0.63	ug/l	
100-01-6	4-Nitroaniline	ND	4.9	0.94	ug/l	
91-20-3	Naphthalene	ND	4.9	0.62	ug/l	
98-95-3	Nitrobenzene	ND	4.9	0.70	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.9	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.9	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.9	0.97	ug/l	
85-01-8	Phenanthrene	ND	4.9	0.68	ug/l	
129-00-0	Pyrene	ND	4.9	0.66	ug/l	
110-86-1	Pyridine	ND	9.7	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.59	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		14-67%
4165-62-2	Phenol-d5	41%		10-50%
118-79-6	2,4,6-Tribromophenol	90%		33-118%
4165-60-0	Nitrobenzene-d5	86%		42-108%
321-60-8	2-Fluorobiphenyl	80%		40-106%
1718-51-0	Terphenyl-d14	92%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121512.D	1	04/12/13	CP	n/a	n/a	GCD4961
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		70-131%
98-08-8	aaa-Trifluorotoluene	85%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47648.D	1	04/18/13	SJL	04/15/13	OP46449	GLL1799
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.24	0.097	mg/l	
	TPH (> C22-C36)	ND	0.24	0.097	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	840	300	29	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	1210	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	2.0 U	4.0	2.0	mg/l	2	04/11/13 08:45	MG	SM19 5210B
Chemical Oxygen Demand	118	20	5.3	mg/l	1	04/17/13 13:40	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	04/12/13 09:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.41	0.40	0.059	mg/l	1	04/22/13 10:20	LM	SM18 3500FED M
Iron, Ferrous [b]	0.43	0.10	0.030	mg/l	1	04/11/13 13:35	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	04/18/13 13:31	VK	EPA 350.1
Nitrogen, Nitrate [c]	7.0 J	10	5.0	mg/l	100	04/12/13 20:52	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	3.8	0.53	0.17	mg/l	1	04/17/13 10:14	MG	EPA 351.2
Solids, Total Dissolved [d]	14900	1000	100	mg/l	10	04/17/13	KC	SM19 2540C
Sulfate	5080	200	60	mg/l	100	04/12/13 20:52	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW30-A		
Lab Sample ID:	FA3562-3F	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	1370	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-4	**Date Sampled:**	04/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I11221.D	1	04/23/13	WV	n/a	n/a	VI43
Run #2 [a]	B090206.D	1	04/24/13	WV	n/a	n/a	VB3692

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-4	**Date Sampled:**	04/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [b]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.6	5.0	2.0	ug/l	J
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.26	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-4	**Date Sampled:**	04/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	91%	79-125%
2037-26-5	Toluene-D8	103%	99%	85-112%
460-00-4	4-Bromofluorobenzene	90%	102%	83-118%

(a) Confirmation run.
(b) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I11222.D	1	04/23/13	WV	n/a	n/a	VI43
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	2.2	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	88%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X027945.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	49	9.7	ug/l	
95-57-8	2-Chlorophenol	ND	4.9	0.69	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.9	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.9	0.68	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.9	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.9	0.70	ug/l	
	3&4-Methylphenol	ND	4.9	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.9	0.66	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.9	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.9	ug/l	
108-95-2	Phenol	ND	4.9	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.9	0.87	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.9	0.76	ug/l	
83-32-9	Acenaphthene	ND	4.9	0.68	ug/l	
208-96-8	Acenaphthylene	ND	4.9	0.67	ug/l	
62-53-3	Aniline	ND	4.9	0.76	ug/l	
120-12-7	Anthracene	ND	4.9	0.73	ug/l	
92-87-5	Benzidine	ND	24	4.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	0.53	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	0.65	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.9	0.77	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.9	0.69	ug/l	
100-51-6	Benzyl Alcohol	ND	4.9	0.97	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.9	0.71	ug/l	
106-47-8	4-Chloroaniline	ND	4.9	0.67	ug/l	
86-74-8	Carbazole	ND	4.9	0.51	ug/l	
218-01-9	Chrysene	ND	4.9	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.9	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.9	0.70	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.9	0.77	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.9	0.85	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.9	0.66	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.9	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.9	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.9	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.9	0.67	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.9	0.78	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.9	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	0.57	ug/l	
132-64-9	Dibenzofuran	ND	4.9	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.9	0.97	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.9	0.97	ug/l	
84-66-2	Diethyl phthalate	ND	4.9	0.97	ug/l	
131-11-3	Dimethyl phthalate	ND	4.9	0.78	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.9	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.9	0.57	ug/l	
86-73-7	Fluorene	ND	4.9	0.74	ug/l	
118-74-1	Hexachlorobenzene	ND	4.9	0.67	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.9	0.93	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.9	0.77	ug/l	
67-72-1	Hexachloroethane	ND	4.9	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	0.56	ug/l	
78-59-1	Isophorone	ND	4.9	0.62	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	0.67	ug/l	
88-74-4	2-Nitroaniline	ND	4.9	0.73	ug/l	
99-09-2	3-Nitroaniline	ND	4.9	0.63	ug/l	
100-01-6	4-Nitroaniline	ND	4.9	0.94	ug/l	
91-20-3	Naphthalene	ND	4.9	0.62	ug/l	
98-95-3	Nitrobenzene	ND	4.9	0.70	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.9	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.9	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.9	0.97	ug/l	
85-01-8	Phenanthrene	ND	4.9	0.68	ug/l	
129-00-0	Pyrene	ND	4.9	0.66	ug/l	
110-86-1	Pyridine	ND	9.7	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.59	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		14-67%
4165-62-2	Phenol-d5	35%		10-50%
118-79-6	2,4,6-Tribromophenol	80%		33-118%
4165-60-0	Nitrobenzene-d5	79%		42-108%
321-60-8	2-Fluorobiphenyl	71%		40-106%
1718-51-0	Terphenyl-d14	83%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121513.D	1	04/12/13	CP	n/a	n/a	GCD4961
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.0509	0.10	0.050	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		70-131%
98-08-8	aaa-Trifluorotoluene	88%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47649.D	1	04/18/13	SJL	04/15/13	OP46449	GLL1799
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.262	0.26	0.10	mg/l	
	TPH (> C22-C36)	ND	0.26	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	400	300	29	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	322	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	2.0 U	4.0	2.0	mg/l	2	04/11/13 08:45	MG	SM19 5210B
Chemical Oxygen Demand	9.9 J	20	5.3	mg/l	1	04/16/13 11:45	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	04/12/13 09:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.13 J	0.40	0.059	mg/l	1	04/22/13 10:24	LM	SM18 3500FED M
Iron, Ferrous [b]	0.27	0.10	0.030	mg/l	1	04/11/13 13:35	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	04/18/13 13:32	VK	EPA 350.1
Nitrogen, Nitrate [c]	5.0 U	10	5.0	mg/l	100	04/12/13 21:40	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	3.5	0.53	0.17	mg/l	1	04/17/13 10:16	MG	EPA 351.2
Solids, Total Dissolved [d]	15000	1000	100	mg/l	10	04/18/13 14:20	KC	SM19 2540C
Sulfate	6150	200	60	mg/l	100	04/12/13 21:40	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA3562-5F	**Date Sampled:**	04/09/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	316	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-6	**Date Sampled:**	04/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I11223.D	1	04/23/13	WV	n/a	n/a	VI43
Run #2 [a]	B090220.D	1	04/25/13	WV	n/a	n/a	VB3693

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-6	**Date Sampled:**	04/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [b]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.22	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-6	**Date Sampled:**	04/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	91%	79-125%
2037-26-5	Toluene-D8	101%	102%	85-112%
460-00-4	4-Bromofluorobenzene	89%	102%	83-118%

(a) Confirmation run.
(b) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I11224.D	1	04/23/13	WV	n/a	n/a	VI43
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	0.30	1.0	0.21	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	10.2	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	1.1	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.41	1.0	0.25	ug/l	J
95-50-1	o-Dichlorobenzene	1.0	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	0.40	1.0	0.20	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	86%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L062789.D	1	04/19/13	NAF	04/12/13	OP46423	SL3186
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	0.90	4.8	0.56	ug/l	J
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		14-67%
4165-62-2	Phenol-d5	36%		10-50%
118-79-6	2,4,6-Tribromophenol	85%		33-118%
4165-60-0	Nitrobenzene-d5	70%		42-108%
321-60-8	2-Fluorobiphenyl	72%		40-106%
1718-51-0	Terphenyl-d14	85%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121514.D	2	04/12/13	CP	n/a	n/a	GCD4961
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.460	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		70-131%
98-08-8	aaa-Trifluorotoluene	103%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47652.D	1	04/18/13	SJL	04/15/13	OP46449	GLL1799
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.281	0.25	0.098	mg/l	
	TPH (> C22-C36)	ND	0.25	0.098	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	2480	300	29	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	2000	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	2.0 U	4.0	2.0	mg/l	2	04/12/13 08:30	MG	SM19 5210B
Chemical Oxygen Demand	14.8 J	20	5.3	mg/l	1	04/16/13 11:45	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	04/12/13 09:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	2.3	0.40	0.059	mg/l	1	04/22/13 10:37	LM	SM18 3500FED M
Iron, Ferrous [b]	0.22	0.10	0.030	mg/l	1	04/11/13 13:35	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	04/18/13 13:35	VK	EPA 350.1
Nitrogen, Nitrate [c]	1.3 U	2.5	1.3	mg/l	25	04/12/13 21:56	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	3.2	0.53	0.17	mg/l	1	04/17/13 10:17	MG	EPA 351.2
Solids, Total Dissolved [d]	5490	500	50	mg/l	5	04/18/13 14:20	KC	SM19 2540C
Sulfate	2980	100	30	mg/l	50	04/15/13 15:54	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA3562-7F	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	2090	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-8	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I11225.D	1	04/23/13	WV	n/a	n/a	VI43
Run #2	B090208.D	1	04/24/13	WV	n/a	n/a	VB3692

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-8	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.1	5.0	2.0	ug/l	J
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND [b]	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-8	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	90%	79-125%
2037-26-5	Toluene-D8	101%	99%	85-112%
460-00-4	4-Bromofluorobenzene	89%	100%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I11226.D	1	04/23/13	WV	n/a	n/a	VI43
Run #2 [a]	I11284.D	1	04/25/13	WV	n/a	n/a	VI45

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND [b]	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.25	1.0	0.21	ug/l	J
98-06-6	tert-Butylbenzene	0.92	1.0	0.29	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	1.1	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [c]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	14.1	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	2.4	5.0	2.3	ug/l	J
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	99%	79-125%
2037-26-5	Toluene-D8	99%	98%	85-112%
460-00-4	4-Bromofluorobenzene	85%	100%	83-118%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.
(b) Result is from Run# 2
(c) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X027947.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	49	9.7	ug/l	
95-57-8	2-Chlorophenol	ND	4.9	0.69	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.9	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.9	0.68	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.9	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.9	0.70	ug/l	
	3&4-Methylphenol	ND	4.9	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.9	0.66	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.9	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.9	ug/l	
108-95-2	Phenol	ND	4.9	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.9	0.87	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.9	0.76	ug/l	
83-32-9	Acenaphthene	ND	4.9	0.68	ug/l	
208-96-8	Acenaphthylene	ND	4.9	0.67	ug/l	
62-53-3	Aniline	ND	4.9	0.76	ug/l	
120-12-7	Anthracene	ND	4.9	0.73	ug/l	
92-87-5	Benzidine	ND	24	4.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	0.53	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	0.65	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.9	0.77	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.9	0.69	ug/l	
100-51-6	Benzyl Alcohol	ND	4.9	0.97	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.9	0.71	ug/l	
106-47-8	4-Chloroaniline	ND	4.9	0.67	ug/l	
86-74-8	Carbazole	ND	4.9	0.51	ug/l	
218-01-9	Chrysene	ND	4.9	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.9	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.9	0.70	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.9	0.77	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.9	0.85	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.9	0.66	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.9	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.9	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.9	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.9	0.67	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.9	0.78	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.9	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	0.57	ug/l	
132-64-9	Dibenzofuran	ND	4.9	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.9	0.97	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.9	0.97	ug/l	
84-66-2	Diethyl phthalate	ND	4.9	0.97	ug/l	
131-11-3	Dimethyl phthalate	ND	4.9	0.78	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.9	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.9	0.57	ug/l	
86-73-7	Fluorene	ND	4.9	0.74	ug/l	
118-74-1	Hexachlorobenzene	ND	4.9	0.67	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.9	0.93	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.9	0.77	ug/l	
67-72-1	Hexachloroethane	ND	4.9	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	0.56	ug/l	
78-59-1	Isophorone	ND	4.9	0.62	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	0.67	ug/l	
88-74-4	2-Nitroaniline	ND	4.9	0.73	ug/l	
99-09-2	3-Nitroaniline	ND	4.9	0.63	ug/l	
100-01-6	4-Nitroaniline	ND	4.9	0.94	ug/l	
91-20-3	Naphthalene	ND	4.9	0.62	ug/l	
98-95-3	Nitrobenzene	ND	4.9	0.70	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.9	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.9	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.9	0.97	ug/l	
85-01-8	Phenanthrene	ND	4.9	0.68	ug/l	
129-00-0	Pyrene	ND	4.9	0.66	ug/l	
110-86-1	Pyridine	ND	9.7	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.59	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		14-67%
4165-62-2	Phenol-d5	43%		10-50%
118-79-6	2,4,6-Tribromophenol	88%		33-118%
4165-60-0	Nitrobenzene-d5	71%		42-108%
321-60-8	2-Fluorobiphenyl	80%		40-106%
1718-51-0	Terphenyl-d14	88%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121515.D	1	04/12/13	CP	n/a	n/a	GCD4961
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.343	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		70-131%
98-08-8	aaa-Trifluorotoluene	86%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47673.D	10	04/19/13	SJL	04/15/13	OP46449	GLL1800
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	7.71	2.5	1.0	mg/l	
	TPH (> C22-C36)	ND	2.5	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	1930	300	29	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	584	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	2.0 U	4.0	2.0	mg/l	2	04/12/13 08:30	MG	SM19 5210B
Chemical Oxygen Demand	213	20	5.3	mg/l	1	04/17/13 13:40	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	04/12/13 09:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	1.1	0.40	0.059	mg/l	1	04/22/13 10:42	LM	SM18 3500FED M
Iron, Ferrous [b]	0.84	0.10	0.030	mg/l	1	04/11/13 13:35	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	04/18/13 13:36	VK	EPA 350.1
Nitrogen, Nitrate [c]	10 U	20	10	mg/l	200	04/13/13 02:10	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	0.17 U	0.53	0.17	mg/l	1	04/17/13 10:30	MG	EPA 351.2
Solids, Total Dissolved [d]	17300	2000	200	mg/l	20	04/18/13 14:20	KC	SM19 2540C
Sulfate	5580	400	120	mg/l	200	04/13/13 02:10	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA3562-9F	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	338	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-10	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I11227.D	1	04/23/13	WV	n/a	n/a	VI43
Run #2	B090209.D	1	04/24/13	WV	n/a	n/a	VB3692

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-10	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [a]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.28 [b]	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-10	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	93%	79-125%
2037-26-5	Toluene-D8	101%	100%	85-112%
460-00-4	4-Bromofluorobenzene	88%	99%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I11230.D	1	04/23/13	WV	n/a	n/a	VI43
Run #2 [a]	M65616.D	1	04/25/13	RB	n/a	n/a	VM2755

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND [b]	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	1.0	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.89	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [c]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	11.1	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.23	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	106%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	109%	79-125%
2037-26-5	Toluene-D8	101%	102%	85-112%
460-00-4	4-Bromofluorobenzene	88%	98%	83-118%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.
(b) Result is from Run# 2
(c) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X027948.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		14-67%
4165-62-2	Phenol-d5	43%		10-50%
118-79-6	2,4,6-Tribromophenol	95%		33-118%
4165-60-0	Nitrobenzene-d5	82%		42-108%
321-60-8	2-Fluorobiphenyl	87%		40-106%
1718-51-0	Terphenyl-d14	96%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121516.D	1	04/12/13	CP	n/a	n/a	GCD4961
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.263	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		70-131%
98-08-8	aaa-Trifluorotoluene	84%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47667.D	10	04/19/13	SJL	04/15/13	OP46449	GLL1800
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	6.05	2.8	1.1	mg/l	
	TPH (> C22-C36)	ND	2.8	1.1	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	523	300	29	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	475	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	2.2 J	13	2.0	mg/l	7	04/12/13 08:30	MG	SM19 5210B
Chemical Oxygen Demand	42.0	20	5.3	mg/l	1	04/16/13 11:45	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	04/12/13 09:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.13 J	0.40	0.059	mg/l	1	04/22/13 10:46	LM	SM18 3500FED M
Iron, Ferrous [b]	0.39	0.10	0.030	mg/l	1	04/11/13 13:35	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	04/18/13 13:38	VK	EPA 350.1
Nitrogen, Nitrate [c]	5.0 U	10	5.0	mg/l	100	04/13/13 02:58	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	3.1	0.53	0.17	mg/l	1	04/17/13 10:19	MG	EPA 351.2
Solids, Total Dissolved [d]	8700	1000	100	mg/l	10	04/18/13 14:20	KC	SM19 2540C
Sulfate	5410	200	60	mg/l	100	04/13/13 02:58	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA3562-11F	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	479	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-12	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I11231.D	1	04/23/13	WV	n/a	n/a	VI43
Run #2 [a]	B090210.D	1	04/24/13	WV	n/a	n/a	VB3692

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-12	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone [b]	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.8	5.0	2.0	ug/l	J
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND [c]	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-12	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	89%	79-125%
2037-26-5	Toluene-D8	100%	101%	85-112%
460-00-4	4-Bromofluorobenzene	89%	100%	83-118%

(a) Sample was not preserved to a pH < 2; reported results are considered minimum values.
(b) Associated BS recovery outside control limits.
(c) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I11232.D	5	04/23/13	WV	n/a	n/a	VI43
Run #2	B090211.D	100	04/24/13	WV	n/a	n/a	VB3692

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	130	50	ug/l	
107-02-8	Acrolein	ND	100	35	ug/l	
107-13-1	Acrylonitrile	ND	50	10	ug/l	
71-43-2	Benzene	3460 [b]	100	21	ug/l	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/l	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/l	
75-25-2	Bromoform	ND	5.0	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	6.8	5.0	1.1	ug/l	
98-06-6	tert-Butylbenzene	7.7	5.0	1.5	ug/l	
108-90-7	Chlorobenzene	9.9	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	5.0	1.3	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	1.1	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	25	6.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.6	ug/l	
75-34-3	1,1-Dichloroethane	2.9	5.0	1.1	ug/l	J
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	1.2	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	3.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	1.5	ug/l	
107-06-2	1,2-Dichloroethane	2.0	5.0	1.1	ug/l	J
78-87-5	1,2-Dichloropropane	ND	5.0	1.3	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	1.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.5	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	49.8	5.0	1.3	ug/l	
95-50-1	o-Dichlorobenzene	185	5.0	1.1	ug/l	
106-46-7	p-Dichlorobenzene	66.8	5.0	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.1	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	94.6	5.0	1.5	ug/l	
591-78-6	2-Hexanone [a]	ND	50	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.5	ug/l	
110-54-3	Hexane	ND	10	4.4	ug/l	
98-82-8	Isopropylbenzene	1290 [b]	100	20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	25	11	ug/l	
74-83-9	Methyl bromide	ND	10	3.9	ug/l	
74-87-3	Methyl chloride	ND	10	2.5	ug/l	
74-95-3	Methylene bromide	ND	10	1.7	ug/l	
75-09-2	Methylene chloride	ND	25	10	ug/l	
78-93-3	Methyl ethyl ketone	ND	25	16	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	25	5.0	ug/l	
103-65-1	n-Propylbenzene	37.5	5.0	1.1	ug/l	
100-42-5	Styrene	ND	5.0	1.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.2	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	2.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	1.0	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.6	ug/l	
108-88-3	Toluene	1.9	5.0	1.0	ug/l	J
79-01-6	Trichloroethylene	ND	5.0	1.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	2.2	ug/l	
108-05-4	Vinyl Acetate	ND	50	16	ug/l	
	m,p-Xylene	3.1	10	1.5	ug/l	J
95-47-6	o-Xylene	ND	5.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	88%	79-125%
2037-26-5	Toluene-D8	102%	102%	85-112%
460-00-4	4-Bromofluorobenzene	87%	99%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	X027949.D	4	04/16/13	FS	04/12/13	OP46423	SX1343
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	190	39	ug/l	
95-57-8	2-Chlorophenol	ND	19	2.7	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	19	3.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	19	2.7	ug/l	
105-67-9	2,4-Dimethylphenol	ND	19	3.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	97	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	39	5.6	ug/l	
95-48-7	2-Methylphenol	ND	19	2.8	ug/l	
	3&4-Methylphenol	ND	19	5.4	ug/l	
88-75-5	2-Nitrophenol	ND	19	2.6	ug/l	
100-02-7	4-Nitrophenol	ND	97	19	ug/l	
87-86-5	Pentachlorophenol	ND	97	19	ug/l	
108-95-2	Phenol	ND	19	2.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	19	3.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	19	3.0	ug/l	
83-32-9	Acenaphthene	ND	19	2.7	ug/l	
208-96-8	Acenaphthylene	ND	19	2.7	ug/l	
62-53-3	Aniline	ND	19	3.0	ug/l	
120-12-7	Anthracene	ND	19	2.9	ug/l	
92-87-5	Benzidine	ND	97	19	ug/l	
56-55-3	Benzo(a)anthracene	ND	19	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	19	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	19	2.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	19	2.6	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	19	2.6	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	19	3.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	19	2.8	ug/l	
100-51-6	Benzyl Alcohol	ND	19	3.9	ug/l	
91-58-7	2-Chloronaphthalene	ND	19	2.8	ug/l	
106-47-8	4-Chloroaniline	ND	19	2.7	ug/l	
86-74-8	Carbazole	ND	19	2.0	ug/l	
218-01-9	Chrysene	ND	19	2.3	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	19	2.7	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	19	2.8	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	19	3.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	19	3.4	ug/l	
95-50-1	1,2-Dichlorobenzene	187	19	2.6	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	19	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	55.6	19	3.0	ug/l	
106-46-7	1,4-Dichlorobenzene	79.0	19	2.7	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	19	2.7	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	19	3.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	19	2.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	19	2.3	ug/l	
132-64-9	Dibenzofuran	ND	19	2.9	ug/l	
84-74-2	Di-n-butyl phthalate	ND	19	3.9	ug/l	
117-84-0	Di-n-octyl phthalate	ND	19	3.9	ug/l	
84-66-2	Diethyl phthalate	ND	19	3.9	ug/l	
131-11-3	Dimethyl phthalate	ND	19	3.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	19	4.5	ug/l	
206-44-0	Fluoranthene	ND	19	2.3	ug/l	
86-73-7	Fluorene	ND	19	3.0	ug/l	
118-74-1	Hexachlorobenzene	ND	19	2.7	ug/l	
87-68-3	Hexachlorobutadiene	ND	19	3.7	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	19	3.1	ug/l	
67-72-1	Hexachloroethane	ND	19	2.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	19	2.2	ug/l	
78-59-1	Isophorone	ND	19	2.5	ug/l	
90-12-0	1-Methylnaphthalene	ND	19	2.7	ug/l	
91-57-6	2-Methylnaphthalene	ND	19	2.7	ug/l	
88-74-4	2-Nitroaniline	ND	19	2.9	ug/l	
99-09-2	3-Nitroaniline	ND	19	2.5	ug/l	
100-01-6	4-Nitroaniline	ND	19	3.8	ug/l	
91-20-3	Naphthalene	ND	19	2.5	ug/l	
98-95-3	Nitrobenzene	ND	19	2.8	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	19	2.4	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	19	3.3	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	19	3.9	ug/l	
85-01-8	Phenanthrene	ND	19	2.7	ug/l	
129-00-0	Pyrene	ND	19	2.6	ug/l	
110-86-1	Pyridine	ND	39	7.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	19	2.4	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	39%		14-67%
4165-62-2	Phenol-d5	31%		10-50%
118-79-6	2,4,6-Tribromophenol	86%		33-118%
4165-60-0	Nitrobenzene-d5	88%		42-108%
321-60-8	2-Fluorobiphenyl	80%		40-106%
1718-51-0	Terphenyl-d14	92%		39-121%

(a) Dilution required due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121517.D	10	04/12/13	CP	n/a	n/a	GCD4961
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	8.85	1.0	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	120%		70-131%
98-08-8	aaa-Trifluorotoluene	97%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47668.D	4	04/19/13	SJL	04/15/13	OP46449	GLL1800
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	1.90	1.0	0.40	mg/l	
	TPH (> C22-C36)	ND	1.0	0.40	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	1140	300	29	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	632	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	16.6	6.0	2.0	mg/l	3	04/12/13 08:30	MG	SM19 5210B
Chemical Oxygen Demand	54.3	20	5.3	mg/l	1	04/16/13 11:45	LE	SM19 5220C
Hydrogen Sulfide	15.0	1.0	0.50	mg/l	1	04/12/13 09:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.17 J	0.40	0.059	mg/l	1	04/22/13 10:51	LM	SM18 3500FED M
Iron, Ferrous [b]	0.97	0.10	0.030	mg/l	1	04/11/13 13:35	LE	SM18 3500FED
Nitrogen, Ammonia	0.094 J	0.10	0.030	mg/l	1	04/18/13 13:39	VK	EPA 350.1
Nitrogen, Nitrate [c]	2.5 U	5.0	2.5	mg/l	50	04/13/13 03:14	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	2.6	0.53	0.17	mg/l	1	04/17/13 10:20	MG	EPA 351.2
Solids, Total Dissolved [d]	6010	500	50	mg/l	5	04/18/13 14:20	KC	SM19 2540C
Sulfate	3810	100	30	mg/l	50	04/13/13 03:14	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample analyzed beyond hold time due to instrument error. Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA3562-13F	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/11/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	648	15	0.70	ug/l	1	04/19/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP24990

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-14	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B090207.D	1	04/24/13	WV	n/a	n/a	VB3692
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-14	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.28	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3562-14	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/11/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	90%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENT INFRASTRUCTURE

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FA3562

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 04102013-02
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
1	SS61-MW30	SS61-MW30	4/9/2013	1600	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				Z
2	Trip Blank				-	TB	1	WQ	2	X													Z
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	4/10/13	1400	1. [signature]		
2. [signature]	4/11/13	1000	2. [signature]	4/11/13	1000
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7994 8773 6497
Analytical Lab: Accutest Labs
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

2.0, 1.6, 1.8, 2.4, 2.4, 1.6, 1.8 20

bhate ENVIRONMENT INFRASTRUCTURE

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FA3562

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 04102013-03
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (5)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Codes ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
3	SS61-MW30-A	SS61-MW30	4/9/2013	1600	-	FD	1	WG	18	X	X	X	X	X	X	X	X	X	X				3
4	Trip Blank				-	TB	1	WQ	2	X													3
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. JH Moore	4/10/13	1400	1. Fo		
2. FI	4-11-13	1000	2. RWilliams	4/11/13	1000
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7994 8773 6545
Analytical Lab: Accutest Labs
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA3562: Chain of Custody
Page 2 of 8

bhate ENVIRONMENT INFRASTRUCTURE

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FA3562

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 04102013-04
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
5	SS61-MW29	SS61-MW29	4/9/2013	1725	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				4
6	Trip Blank				-	TB	1	WQ	2	X													4
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. JH Moore	4/10/13	1400	1. RO		
2. RO	04-11-13	1000	2. RWilliams	4-11-13	1000
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7994 8773 6453
Analytical Lab: Accutest Labs
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA3562: Chain of Custody
Page 3 of 8

bhate ENVIRONMENT INFRASTRUCTURE

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FA3562

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 04102013-05
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
7 SS61-MW27	SS61-MW27	4/10/2013	0840	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				5
8 Trip Blank				-	TB	1	WQ	2	X													5
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. JH Moore	4/10/13	1400	1. [illegible]		
2. FD	04-11-13	1000	2. [illegible]	4/11/13	1000
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7994 8773 6795
Analytical Lab: Accutest Labs Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA3562: Chain of Custody
Page 4 of 8

bhate ENVIRONMENT INFRASTRUCTURE

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FA 3562

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 04102013-06
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
					Sample Analysis Requested (5)														Quality Assurance Samples (6)			
8 SS61-MW31	SS61-MW31	4/10/13	0845	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				6
10 Trip Blank				-	TB	1	WQ	2	X													6
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	4/10/13	1400	1. [signature]		
2. [signature]	04-11-13	1000	2. [signature]	04/11/13	1000
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7994 8773 6659
Analytical Lab: Accutest Labs Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

bhate ENVIRONMENT INFRASTRUCTURE

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FA3562

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
Number(1): 04102013-07
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
11	SS61-MW28	SS61-MW28	4/10/13	1020	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				7
12	Trip Blank				-	TB	1	WQ	2	X													7
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. JH Mann	4/10/13	1400	1. RW		
2. RW	4/11/13	1000	2. RWilk	4/11/13	1000
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7994 8773 6800
Analytical Lab: Accutest Labs Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

bhate ENVIRONMENT INFRASTRUCTURE

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FA3562

Page: 1 of 1

No: 9100133

COC Number(1): 04102013-08

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base

Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)

Client Name: USACE - Omaha District

Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
13	SS61-MW25	SS61-MW25	4/10/2013	1025	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				8
14	Trip Blank				-	TB	1	WQ	2	X													8
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	4/10/13	1400	1. [signature]		
2. [signature]	04-12-13	1000	2. [signature]	04-12-13	1000
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:

Method of Shipment: Fed Ex Airbill Number: 7994 8773 6751

Analytical Lab: Accutest Labs Delivery Location: Orlando, FL

Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA3562 CLIENT: B-Hate PROJECT: SS61 VCM Monitoring (GW-Q4)

DATE/TIME RECEIVED: 04-11-13 1000 (MM/DD/YY 24:00) NIMBER OF COOLERS RECEIVED: 8

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7994 8773 6442

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [X] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [X] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [X] RECEIVED WATER TRIP BLANK (7)
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 1.6 1.2 1.4 2.0 2.0 6.4 1.4 1.6
- [ ] CORRECTED TEMPS: 2.0 1.6, 1.8, 2.4, 2.4, 1.8, 1.8 2.0

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 04-11-13 REVIEWER SIGNATURE/DATE 04/12/13

NF 12/10

receipt confirmation 122910.xls

5.1

5

FA3562: Chain of Custody

Page 8 of 8

Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP598-MB	P15505.D	1	04/22/13	EG	n/a	n/a	VP598

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP598-MB	P15505.D	1	04/22/13	EG	n/a	n/a	VP598

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP598-MB	P15505.D	1	04/22/13	EG	n/a	n/a	VP598

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	102%	83-118%

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3691-MB	B090162.D	1	04/23/13	WV	n/a	n/a	VB3691

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Compound	Result	RL	MDL	Units	Q
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	79-125%
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	102%	83-118%

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI43-MB	I11217.D	1	04/23/13	WV	n/a	n/a	VI43

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-4, FA3562-5, FA3562-6, FA3562-7, FA3562-8, FA3562-9, FA3562-10, FA3562-11, FA3562-12, FA3562-13

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI43-MB	I11217.D	1	04/23/13	WV	n/a	n/a	VI43

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-4, FA3562-5, FA3562-6, FA3562-7, FA3562-8, FA3562-9, FA3562-10, FA3562-11, FA3562-12, FA3562-13

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI43-MB	I11217.D	1	04/23/13	WV	n/a	n/a	VI43

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-4, FA3562-5, FA3562-6, FA3562-7, FA3562-8, FA3562-9, FA3562-10, FA3562-11, FA3562-12, FA3562-13

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	79-125%
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	90%	83-118%

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3692-MB	B090190.D	1	04/24/13	WV	n/a	n/a	VB3692

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-8, FA3562-10, FA3562-12, FA3562-13, FA3562-14

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3692-MB	B090190.D	1	04/24/13	WV	n/a	n/a	VB3692

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-8, FA3562-10, FA3562-12, FA3562-13, FA3562-14

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.57	1.0	0.50	ug/l	J
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3692-MB	B090190.D	1	04/24/13	WV	n/a	n/a	VB3692

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-8, FA3562-10, FA3562-12, FA3562-13, FA3562-14

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	92%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM2755-MB	M65610.D	1	04/25/13	RB	n/a	n/a	VM2755

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-11

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI45-MB	I11283.D	1	04/25/13	WV	n/a	n/a	VI45

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3693-MB	B090217.D	1	04/25/13	WV	n/a	n/a	VB3693

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-6

CAS No.	Compound	Result	RL	MDL	Units	Q

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	103%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP598-BS	P15504.D	1	04/22/13	EG	n/a	n/a	VP598

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	203	162*	50-147
107-02-8	Acrolein	125	108	86	31-154
107-13-1	Acrylonitrile	125	113	90	58-126
71-43-2	Benzene	25	24.1	96	81-122
108-86-1	Bromobenzene	25	23.9	96	80-121
74-97-5	Bromochloromethane	25	22.5	90	76-123
75-27-4	Bromodichloromethane	25	25.6	102	79-123
75-25-2	Bromoform	25	22.7	91	66-123
104-51-8	n-Butylbenzene	25	22.7	91	79-126
135-98-8	sec-Butylbenzene	25	25.8	103	83-133
98-06-6	tert-Butylbenzene	25	27.1	108	80-133
108-90-7	Chlorobenzene	25	25.8	103	82-124
75-00-3	Chloroethane	25	31.2	125	62-144
67-66-3	Chloroform	25	23.8	95	80-124
95-49-8	o-Chlorotoluene	25	25.7	103	81-127
106-43-4	p-Chlorotoluene	25	26.5	106	83-130
75-15-0	Carbon disulfide	25	23.1	92	66-148
56-23-5	Carbon tetrachloride	25	24.2	97	76-136
75-34-3	1,1-Dichloroethane	25	23.7	95	81-122
75-35-4	1,1-Dichloroethylene	25	24.3	97	78-137
563-58-6	1,1-Dichloropropene	25	26.2	105	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	22.1	88	64-123
106-93-4	1,2-Dibromoethane	25	23.3	93	75-120
107-06-2	1,2-Dichloroethane	25	22.8	91	75-125
78-87-5	1,2-Dichloropropane	25	24.1	96	76-124
142-28-9	1,3-Dichloropropane	25	21.8	87	80-118
594-20-7	2,2-Dichloropropane	25	25.8	103	74-139
124-48-1	Dibromochloromethane	25	25.3	101	78-122
75-71-8	Dichlorodifluoromethane	25	25.8	103	42-167
156-59-2	cis-1,2-Dichloroethylene	25	23.8	95	78-120
10061-01-5	cis-1,3-Dichloropropene	25	22.5	90	75-118
541-73-1	m-Dichlorobenzene	25	26.5	106	84-125
95-50-1	o-Dichlorobenzene	25	25.5	102	82-124
106-46-7	p-Dichlorobenzene	25	23.7	95	78-120
156-60-5	trans-1,2-Dichloroethylene	25	24.0	96	76-127
10061-02-6	trans-1,3-Dichloropropene	25	24.7	99	80-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP598-BS	P15504.D	1	04/22/13	EG	n/a	n/a	VP598

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	25	24.7	99	81-121
591-78-6	2-Hexanone	125	127	102	61-129
87-68-3	Hexachlorobutadiene	25	26.2	105	75-142
98-82-8	Isopropylbenzene	25	25.2	101	83-132
99-87-6	p-Isopropyltoluene	25	25.0	100	79-130
108-10-1	4-Methyl-2-pentanone	125	118	94	66-122
74-83-9	Methyl bromide	25	34.0	136	59-143
74-87-3	Methyl chloride	25	32.2	129	50-159
74-95-3	Methylene bromide	25	23.2	93	78-119
75-09-2	Methylene chloride	25	23.9	96	69-135
78-93-3	Methyl ethyl ketone	125	128	102	56-143
1634-04-4	Methyl Tert Butyl Ether	25	21.0	84	72-117
91-20-3	Naphthalene	25	22.8	91	63-132
103-65-1	n-Propylbenzene	25	27.2	109	82-133
100-42-5	Styrene	25	23.8	95	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	24.4	98	77-122
71-55-6	1,1,1-Trichloroethane	25	24.9	100	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	22.9	92	72-120
79-00-5	1,1,2-Trichloroethane	25	22.0	88	76-119
87-61-6	1,2,3-Trichlorobenzene	25	24.0	96	68-131
96-18-4	1,2,3-Trichloropropane	25	23.2	93	77-120
120-82-1	1,2,4-Trichlorobenzene	25	24.6	98	73-129
95-63-6	1,2,4-Trimethylbenzene	25	24.4	98	79-120
108-67-8	1,3,5-Trimethylbenzene	25	24.8	99	79-120
127-18-4	Tetrachloroethylene	25	27.4	110	76-135
108-88-3	Toluene	25	24.6	98	80-120
79-01-6	Trichloroethylene	25	23.3	93	81-126
75-69-4	Trichlorofluoromethane	25	36.3	145	71-156
75-01-4	Vinyl chloride	25	34.8	139	69-159
108-05-4	Vinyl Acetate	125	119	95	43-154
	m,p-Xylene	50	52.0	104	79-126
95-47-6	o-Xylene	25	24.5	98	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP598-BS	P15504.D	1	04/22/13	EG	n/a	n/a	VP598

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3691-BS	B090161.D	1	04/23/13	WV	n/a	n/a	VB3691

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
110-75-8	2-Chloroethyl vinyl ether	125	115	92	56-122
110-54-3	Hexane	25	30.9	124	69-132

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI43-BS	I11216.D	1	04/23/13	WV	n/a	n/a	VI43

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-4, FA3562-5, FA3562-6, FA3562-7, FA3562-8, FA3562-9, FA3562-10, FA3562-11, FA3562-12, FA3562-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	247	198*	50-147
107-02-8	Acrolein	125	113	90	31-154
107-13-1	Acrylonitrile	125	136	109	58-126
71-43-2	Benzene	25	26.3	105	81-122
108-86-1	Bromobenzene	25	23.8	95	80-121
74-97-5	Bromochloromethane	25	23.6	94	76-123
75-27-4	Bromodichloromethane	25	24.7	99	79-123
75-25-2	Bromoform	25	23.8	95	66-123
104-51-8	n-Butylbenzene	25	25.8	103	79-126
135-98-8	sec-Butylbenzene	25	27.6	110	83-133
98-06-6	tert-Butylbenzene	25	26.4	106	80-133
108-90-7	Chlorobenzene	25	26.2	105	82-124
75-00-3	Chloroethane	25	29.5	118	62-144
67-66-3	Chloroform	25	24.5	98	80-124
95-49-8	o-Chlorotoluene	25	25.7	103	81-127
106-43-4	p-Chlorotoluene	25	26.8	107	83-130
110-75-8	2-Chloroethyl vinyl ether	125	116	93	56-122
75-15-0	Carbon disulfide	25	31.7	127	66-148
56-23-5	Carbon tetrachloride	25	24.8	99	76-136
75-34-3	1,1-Dichloroethane	25	26.2	105	81-122
75-35-4	1,1-Dichloroethylene	25	28.2	113	78-137
563-58-6	1,1-Dichloropropene	25	26.8	107	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	22.7	91	64-123
106-93-4	1,2-Dibromoethane	25	23.6	94	75-120
107-06-2	1,2-Dichloroethane	25	24.3	97	75-125
78-87-5	1,2-Dichloropropane	25	25.9	104	76-124
142-28-9	1,3-Dichloropropane	25	24.5	98	80-118
594-20-7	2,2-Dichloropropane	25	25.9	104	74-139
124-48-1	Dibromochloromethane	25	23.5	94	78-122
75-71-8	Dichlorodifluoromethane	25	27.1	108	42-167
156-59-2	cis-1,2-Dichloroethylene	25	24.5	98	78-120
10061-01-5	cis-1,3-Dichloropropene	25	23.3	93	75-118
541-73-1	m-Dichlorobenzene	25	25.9	104	84-125
95-50-1	o-Dichlorobenzene	25	25.2	101	82-124
106-46-7	p-Dichlorobenzene	25	23.9	96	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.8	107	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI43-BS	I11216.D	1	04/23/13	WV	n/a	n/a	VI43

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-4, FA3562-5, FA3562-6, FA3562-7, FA3562-8, FA3562-9, FA3562-10, FA3562-11, FA3562-12, FA3562-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	26.2	105	80-120
100-41-4	Ethylbenzene	25	25.9	104	81-121
591-78-6	2-Hexanone	125	163	130*	61-129
87-68-3	Hexachlorobutadiene	25	27.5	110	75-142
110-54-3	Hexane	25	26.7	107	69-132
98-82-8	Isopropylbenzene	25	27.6	110	83-132
99-87-6	p-Isopropyltoluene	25	26.0	104	79-130
108-10-1	4-Methyl-2-pentanone	125	143	114	66-122
74-83-9	Methyl bromide	25	29.7	119	59-143
74-87-3	Methyl chloride	25	30.3	121	50-159
74-95-3	Methylene bromide	25	22.7	91	78-119
75-09-2	Methylene chloride	25	26.2	105	69-135
78-93-3	Methyl ethyl ketone	125	169	135	56-143
1634-04-4	Methyl Tert Butyl Ether	25	23.3	93	72-117
91-20-3	Naphthalene	25	25.1	100	63-132
103-65-1	n-Propylbenzene	25	27.5	110	82-133
100-42-5	Styrene	25	24.8	99	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	24.3	97	77-122
71-55-6	1,1,1-Trichloroethane	25	25.5	102	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	24.0	96	72-120
79-00-5	1,1,2-Trichloroethane	25	25.2	101	76-119
87-61-6	1,2,3-Trichlorobenzene	25	26.3	105	68-131
96-18-4	1,2,3-Trichloropropane	25	22.5	90	77-120
120-82-1	1,2,4-Trichlorobenzene	25	26.7	107	73-129
95-63-6	1,2,4-Trimethylbenzene	25	24.3	97	79-120
108-67-8	1,3,5-Trimethylbenzene	25	24.1	96	79-120
127-18-4	Tetrachloroethylene	25	26.5	106	76-135
108-88-3	Toluene	25	25.5	102	80-120
79-01-6	Trichloroethylene	25	26.1	104	81-126
75-69-4	Trichlorofluoromethane	25	30.1	120	71-156
75-01-4	Vinyl chloride	25	31.9	128	69-159
108-05-4	Vinyl Acetate	125	127	102	43-154
	m,p-Xylene	50	53.2	106	79-126
95-47-6	o-Xylene	25	26.5	106	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI43-BS	I11216.D	1	04/23/13	WV	n/a	n/a	VI43

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-4, FA3562-5, FA3562-6, FA3562-7, FA3562-8, FA3562-9, FA3562-10, FA3562-11, FA3562-12, FA3562-13

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	83-118%
17060-07-0	1,2-Dichloroethane-D4	95%	79-125%
2037-26-5	Toluene-D8	96%	85-112%
460-00-4	4-Bromofluorobenzene	89%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3692-BS	B090189.D	1	04/24/13	WV	n/a	n/a	VB3692

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-8, FA3562-10, FA3562-12, FA3562-13, FA3562-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	121	97	50-147
107-02-8	Acrolein	125	119	95	31-154
107-13-1	Acrylonitrile	125	118	94	58-126
71-43-2	Benzene	25	25.5	102	81-122
108-86-1	Bromobenzene	25	24.2	97	80-121
74-97-5	Bromochloromethane	25	25.1	100	76-123
75-27-4	Bromodichloromethane	25	23.1	92	79-123
75-25-2	Bromoform	25	22.9	92	66-123
104-51-8	n-Butylbenzene	25	26.6	106	79-126
135-98-8	sec-Butylbenzene	25	28.4	114	83-133
98-06-6	tert-Butylbenzene	25	29.1	116	80-133
108-90-7	Chlorobenzene	25	26.3	105	82-124
75-00-3	Chloroethane	25	24.5	98	62-144
67-66-3	Chloroform	25	22.3	89	80-124
95-49-8	o-Chlorotoluene	25	25.9	104	81-127
106-43-4	p-Chlorotoluene	25	26.6	106	83-130
110-75-8	2-Chloroethyl vinyl ether	125	108	86	56-122
75-15-0	Carbon disulfide	25	31.6	126	66-148
56-23-5	Carbon tetrachloride	25	23.7	95	76-136
75-34-3	1,1-Dichloroethane	25	23.9	96	81-122
75-35-4	1,1-Dichloroethylene	25	26.9	108	78-137
563-58-6	1,1-Dichloropropene	25	24.9	100	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	21.7	87	64-123
106-93-4	1,2-Dibromoethane	25	23.6	94	75-120
107-06-2	1,2-Dichloroethane	25	21.5	86	75-125
78-87-5	1,2-Dichloropropane	25	24.2	97	76-124
142-28-9	1,3-Dichloropropane	25	24.3	97	80-118
594-20-7	2,2-Dichloropropane	25	23.9	96	74-139
124-48-1	Dibromochloromethane	25	24.3	97	78-122
75-71-8	Dichlorodifluoromethane	25	24.2	97	42-167
156-59-2	cis-1,2-Dichloroethylene	25	24.1	96	78-120
10061-01-5	cis-1,3-Dichloropropene	25	22.6	90	75-118
541-73-1	m-Dichlorobenzene	25	26.5	106	84-125
95-50-1	o-Dichlorobenzene	25	25.6	102	82-124
106-46-7	p-Dichlorobenzene	25	23.4	94	78-120
156-60-5	trans-1,2-Dichloroethylene	25	25.3	101	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3692-BS	B090189.D	1	04/24/13	WV	n/a	n/a	VB3692

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-8, FA3562-10, FA3562-12, FA3562-13, FA3562-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	23.4	94	80-120
100-41-4	Ethylbenzene	25	25.7	103	81-121
591-78-6	2-Hexanone	125	127	102	61-129
87-68-3	Hexachlorobutadiene	25	24.2	97	75-142
110-54-3	Hexane	25	28.3	113	69-132
98-82-8	Isopropylbenzene	25	27.2	109	83-132
99-87-6	p-Isopropyltoluene	25	26.7	107	79-130
108-10-1	4-Methyl-2-pentanone	125	117	94	66-122
74-83-9	Methyl bromide	25	27.5	110	59-143
74-87-3	Methyl chloride	25	26.1	104	50-159
74-95-3	Methylene bromide	25	22.5	90	78-119
75-09-2	Methylene chloride	25	26.8	107	69-135
78-93-3	Methyl ethyl ketone	125	117	94	56-143
1634-04-4	Methyl Tert Butyl Ether	25	20.9	84	72-117
91-20-3	Naphthalene	25	23.5	94	63-132
103-65-1	n-Propylbenzene	25	27.5	110	82-133
100-42-5	Styrene	25	24.9	100	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.3	101	77-122
71-55-6	1,1,1-Trichloroethane	25	23.9	96	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	24.1	96	72-120
79-00-5	1,1,2-Trichloroethane	25	24.5	98	76-119
87-61-6	1,2,3-Trichlorobenzene	25	24.2	97	68-131
96-18-4	1,2,3-Trichloropropane	25	22.3	89	77-120
120-82-1	1,2,4-Trichlorobenzene	25	24.3	97	73-129
95-63-6	1,2,4-Trimethylbenzene	25	24.9	100	79-120
108-67-8	1,3,5-Trimethylbenzene	25	24.7	99	79-120
127-18-4	Tetrachloroethylene	25	24.5	98	76-135
108-88-3	Toluene	25	25.4	102	80-120
79-01-6	Trichloroethylene	25	25.2	101	81-126
75-69-4	Trichlorofluoromethane	25	29.2	117	71-156
75-01-4	Vinyl chloride	25	28.1	112	69-159
108-05-4	Vinyl Acetate	125	124	99	43-154
	m,p-Xylene	50	52.8	106	79-126
95-47-6	o-Xylene	25	26.5	106	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3692-BS	B090189.D	1	04/24/13	WV	n/a	n/a	VB3692

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-8, FA3562-10, FA3562-12, FA3562-13, FA3562-14

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	87%	79-125%
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	102%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM2755-BS	M65609.D	1	04/25/13	RB	n/a	n/a	VM2755

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	149	119	50-147

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI45-BS	I11282.D	1	04/25/13	WV	n/a	n/a	VI45

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	117	94	50-147

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	79-125%
2037-26-5	Toluene-D8	95%	85-112%
460-00-4	4-Bromofluorobenzene	94%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3693-BS	B090216.D	1	04/25/13	WV	n/a	n/a	VB3693

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	79-125%
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3438-5MS	P15513.D	10	04/22/13	EG	n/a	n/a	VP598
FA3438-5MSD	P15514.D	10	04/22/13	EG	n/a	n/a	VP598
FA3438-5 [a]	P15511.D	10	04/22/13	EG	n/a	n/a	VP598

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Compound	FA3438-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		1250	1270	102	1230	98	3	50-147/21
107-02-8	Acrolein	ND		1250	778	62	829	66	6	31-154/29
107-13-1	Acrylonitrile	ND		1250	1010	81	1070	86	6	58-126/16
71-43-2	Benzene	934		250	1130	78* [b]	1110	70* [b]	2	81-122/14
108-86-1	Bromobenzene	ND		250	220	88	216	86	2	80-121/14
74-97-5	Bromochloromethane	ND		250	204	82	208	83	2	76-123/14
75-27-4	Bromodichloromethane	ND		250	220	88	201	80	9	79-123/19
75-25-2	Bromoform	ND		250	152	61*	154	62*	1	66-123/21
104-51-8	n-Butylbenzene	ND		250	217	87	216	86	0	79-126/16
135-98-8	sec-Butylbenzene	ND		250	242	97	241	96	0	83-133/16
98-06-6	tert-Butylbenzene	ND		250	257	103	246	98	4	80-133/16
108-90-7	Chlorobenzene	ND		250	244	98	246	98	1	82-124/14
75-00-3	Chloroethane	ND		250	253	101	253	101	0	62-144/20
67-66-3	Chloroform	ND		250	231	92	224	90	3	80-124/15
95-49-8	o-Chlorotoluene	ND		250	243	97	240	96	1	81-127/15
106-43-4	p-Chlorotoluene	ND		250	251	100	242	97	4	83-130/15
75-15-0	Carbon disulfide	ND		250	177	71	145	58*	20	66-148/23
56-23-5	Carbon tetrachloride	ND		250	229	92	206	82	11	76-136/23
75-34-3	1,1-Dichloroethane	ND		250	224	90	217	87	3	81-122/15
75-35-4	1,1-Dichloroethylene	ND		250	224	90	220	88	2	78-137/18
563-58-6	1,1-Dichloropropene	ND		250	249	100	234	94	6	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	213	85	220	88	3	64-123/18
106-93-4	1,2-Dibromoethane	ND		250	219	88	230	92	5	75-120/13
107-06-2	1,2-Dichloroethane	ND		250	225	90	223	89	1	75-125/14
78-87-5	1,2-Dichloropropane	ND		250	223	89	220	88	1	76-124/14
142-28-9	1,3-Dichloropropane	ND		250	207	83	211	84	2	80-118/13
594-20-7	2,2-Dichloropropane	ND		250	249	100	239	96	4	74-139/17
124-48-1	Dibromochloromethane	ND		250	188	75*	176	70*	7	78-122/19
75-71-8	Dichlorodifluoromethane	ND		250	212	85	210	84	1	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND		250	227	91	214	86	6	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		250	209	84	183	73*	13	75-118/23
541-73-1	m-Dichlorobenzene	ND		250	240	96	236	94	2	84-125/14
95-50-1	o-Dichlorobenzene	ND		250	236	94	231	92	2	82-124/14
106-46-7	p-Dichlorobenzene	ND		250	224	90	220	88	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		250	222	89	213	85	4	76-127/17
10061-02-6	trans-1,3-Dichloropropene	ND		250	220	88	209	84	5	80-120/22

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3438-5MS	P15513.D	10	04/22/13	EG	n/a	n/a	VP598
FA3438-5MSD	P15514.D	10	04/22/13	EG	n/a	n/a	VP598
FA3438-5 [a]	P15511.D	10	04/22/13	EG	n/a	n/a	VP598

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Compound	FA3438-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	47.7		250	283	94	277	92	2	81-121/14
591-78-6	2-Hexanone	ND		1250	1070	86	1100	88	3	61-129/18
87-68-3	Hexachlorobutadiene	ND		250	241	96	250	100	4	75-142/19
98-82-8	Isopropylbenzene	3.8	J	250	245	96	239	94	2	83-132/15
99-87-6	p-Isopropyltoluene	ND		250	233	93	225	90	3	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		1250	1080	86	1120	90	4	66-122/16
74-83-9	Methyl bromide	ND		250	281	112	279	112	1	59-143/19
74-87-3	Methyl chloride	ND		250	261	104	269	108	3	50-159/19
74-95-3	Methylene bromide	ND		250	218	87	215	86	1	78-119/14
75-09-2	Methylene chloride	ND		250	219	88	214	86	2	69-135/16
78-93-3	Methyl ethyl ketone	ND		1250	1030	82	1050	84	2	56-143/18
1634-04-4	Methyl Tert Butyl Ether	160		250	360	80	351	76	3	72-117/14
91-20-3	Naphthalene	19.9	J	250	225	82	246	90	9	63-132/25
103-65-1	n-Propylbenzene	6.0	J	250	261	102	254	99	3	82-133/15
100-42-5	Styrene	ND		250	223	89	219	88	2	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	237	95	212	85	11	77-122/19
71-55-6	1,1,1-Trichloroethane	ND		250	238	95	224	90	6	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	209	84	216	86	3	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		250	209	84	215	86	3	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		250	202	81	223	89	10	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		250	215	86	224	90	4	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		250	221	88	233	93	5	73-129/20
95-63-6	1,2,4-Trimethylbenzene	65.8		250	305	96	297	92	3	79-120/18
108-67-8	1,3,5-Trimethylbenzene	10.7	J	250	246	94	241	92	2	79-120/19
127-18-4	Tetrachloroethylene	ND		250	246	98	238	95	3	76-135/16
108-88-3	Toluene	80.9		250	311	92	305	90	2	80-120/14
79-01-6	Trichloroethylene	ND		250	233	93	224	90	4	81-126/15
75-69-4	Trichlorofluoromethane	ND		250	309	124	305	122	1	71-156/21
75-01-4	Vinyl chloride	ND		250	273	109	291	116	6	69-159/18
108-05-4	Vinyl Acetate	ND		1250	1170	94	1150	92	2	43-154/14
	m,p-Xylene	154		500	651	99	624	94	4	79-126/15
95-47-6	o-Xylene	44.3		250	280	94	271	91	3	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3438-5MS	P15513.D	10	04/22/13	EG	n/a	n/a	VP598
FA3438-5MSD	P15514.D	10	04/22/13	EG	n/a	n/a	VP598
FA3438-5 [a]	P15511.D	10	04/22/13	EG	n/a	n/a	VP598

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Surrogate Recoveries	MS	MSD	FA3438-5	Limits
1868-53-7	Dibromofluoromethane	99%	97%	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	101%	100%	79-125%
2037-26-5	Toluene-D8	99%	99%	100%	85-112%
460-00-4	4-Bromofluorobenzene	100%	102%	101%	83-118%

(a) Confirmation run.
(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3803-1MS	B090174.D	50	04/23/13	WV	n/a	n/a	VB3691
FA3803-1MSD	B090175.D	50	04/23/13	WV	n/a	n/a	VB3691
FA3803-1	B090163.D	50	04/23/13	WV	n/a	n/a	VB3691

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-1, FA3562-2, FA3562-3

CAS No.	Compound	FA3803-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
110-75-8	2-Chloroethyl vinyl ether	250 U		6250	4140	66	3620	58	13	56-122/23
110-54-3	Hexane	100 U		1250	1510	121	1480	118	2	69-132/20

CAS No.	Surrogate Recoveries	MS	MSD	FA3803-1	Limits
1868-53-7	Dibromofluoromethane	96%	98%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	85%	90%	104%	79-125%
2037-26-5	Toluene-D8	103%	104%	97%	85-112%
460-00-4	4-Bromofluorobenzene	101%	99%	97%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3562-5MS	I11228.D	1	04/23/13	WV	n/a	n/a	VI43
FA3562-5MSD	I11229.D	1	04/23/13	WV	n/a	n/a	VI43
FA3562-5	I11222.D	1	04/23/13	WV	n/a	n/a	VI43

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-4, FA3562-5, FA3562-6, FA3562-7, FA3562-8, FA3562-9, FA3562-10, FA3562-11, FA3562-12, FA3562-13

CAS No.	Compound	FA3562-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	157	126	167	134	6	50-147/21
107-02-8	Acrolein	ND		125	96.1	77	88.7	71	8	31-154/29
107-13-1	Acrylonitrile	ND		125	151	121	151	121	0	58-126/16
71-43-2	Benzene	ND		25	27.0	108	26.1	104	3	81-122/14
108-86-1	Bromobenzene	ND		25	25.0	100	23.7	95	5	80-121/14
74-97-5	Bromochloromethane	ND		25	25.0	100	24.7	99	1	76-123/14
75-27-4	Bromodichloromethane	ND		25	24.9	100	21.5	86	15	79-123/19
75-25-2	Bromoform	ND		25	23.5	94	17.1	68	32*	66-123/21
104-51-8	n-Butylbenzene	ND		25	25.6	102	24.6	98	4	79-126/16
135-98-8	sec-Butylbenzene	ND		25	27.5	110	26.3	105	4	83-133/16
98-06-6	tert-Butylbenzene	ND		25	26.1	104	25.1	100	4	80-133/16
108-90-7	Chlorobenzene	ND		25	27.0	108	25.5	102	6	82-124/14
75-00-3	Chloroethane	ND		25	29.1	116	30.1	120	3	62-144/20
67-66-3	Chloroform	ND		25	24.9	100	23.9	96	4	80-124/15
95-49-8	o-Chlorotoluene	ND		25	25.7	103	24.7	99	4	81-127/15
106-43-4	p-Chlorotoluene	ND		25	27.0	108	25.8	103	5	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		125	ND	0*	ND	0*	nc	56-122/23
75-15-0	Carbon disulfide	ND		25	27.5	110	14.6	58*	61*	66-148/23
56-23-5	Carbon tetrachloride	ND		25	24.5	98	19.4	78	23	76-136/23
75-34-3	1,1-Dichloroethane	ND		25	27.2	109	26.0	104	5	81-122/15
75-35-4	1,1-Dichloroethylene	ND		25	29.7	119	27.8	111	7	78-137/18
563-58-6	1,1-Dichloropropene	ND		25	27.5	110	25.3	101	8	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	25.3	101	26.5	106	5	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	24.1	96	23.7	95	2	75-120/13
107-06-2	1,2-Dichloroethane	2.2		25	27.4	101	26.4	97	4	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	27.0	108	26.0	104	4	76-124/14
142-28-9	1,3-Dichloropropane	ND		25	24.8	99	25.0	100	1	80-118/13
594-20-7	2,2-Dichloropropane	ND		25	26.9	108	25.5	102	5	74-139/17
124-48-1	Dibromochloromethane	ND		25	22.5	90	17.4	70*	26*	78-122/19
75-71-8	Dichlorodifluoromethane	ND		25	26.1	104	26.6	106	2	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND		25	25.0	100	23.3	93	7	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	22.0	88	15.9	64*	32*	75-118/23
541-73-1	m-Dichlorobenzene	ND		25	26.9	108	25.4	102	6	84-125/14
95-50-1	o-Dichlorobenzene	ND		25	26.6	106	25.3	101	5	82-124/14
106-46-7	p-Dichlorobenzene	ND		25	24.3	97	22.8	91	6	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	28.1	112	25.1	100	11	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3562-5MS	I11228.D	1	04/23/13	WV	n/a	n/a	VI43
FA3562-5MSD	I11229.D	1	04/23/13	WV	n/a	n/a	VI43
FA3562-5	I11222.D	1	04/23/13	WV	n/a	n/a	VI43

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-4, FA3562-5, FA3562-6, FA3562-7, FA3562-8, FA3562-9, FA3562-10, FA3562-11, FA3562-12, FA3562-13

CAS No.	Compound	FA3562-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		25	25.2	101	18.4	74*	31*	80-120/22
100-41-4	Ethylbenzene	ND		25	25.8	103	24.4	98	6	81-121/14
591-78-6	2-Hexanone	ND		125	186	149*	189	151*	2	61-129/18
87-68-3	Hexachlorobutadiene	ND		25	26.3	105	26.0	104	1	75-142/19
110-54-3	Hexane	ND		25	28.4	114	25.0	100	13	69-132/20
98-82-8	Isopropylbenzene	ND		25	27.5	110	26.5	106	4	83-132/15
99-87-6	p-Isopropyltoluene	ND		25	26.0	104	24.9	100	4	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		125	178	142*	182	146*	2	66-122/16
74-83-9	Methyl bromide	ND		25	29.9	120	29.8	119	0	59-143/19
74-87-3	Methyl chloride	ND		25	32.5	130	31.3	125	4	50-159/19
74-95-3	Methylene bromide	ND		25	24.7	99	23.7	95	4	78-119/14
75-09-2	Methylene chloride	ND		25	28.1	112	27.3	109	3	69-135/16
78-93-3	Methyl ethyl ketone	ND		125	155	124	160	128	3	56-143/18
1634-04-4	Methyl Tert Butyl Ether	ND		25	24.4	98	24.9	100	2	72-117/14
91-20-3	Naphthalene	ND		25	28.3	113	28.3	113	0	63-132/25
103-65-1	n-Propylbenzene	ND		25	27.0	108	25.8	103	5	82-133/15
100-42-5	Styrene	ND		25	23.0	92	15.5	62*	39*	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		25	24.7	99	23.3	93	6	77-122/19
71-55-6	1,1,1-Trichloroethane	ND		25	25.3	101	24.5	98	3	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	26.2	105	27.2	109	4	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		25	25.5	102	25.5	102	0	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	27.1	108	26.9	108	1	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		25	25.1	100	24.7	99	2	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		25	26.5	106	26.4	106	0	73-129/20
95-63-6	1,2,4-Trimethylbenzene	ND		25	23.4	94	20.2	81	15	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		25	23.3	93	22.0	88	6	79-120/19
127-18-4	Tetrachloroethylene	ND		25	26.6	106	25.3	101	5	76-135/16
108-88-3	Toluene	ND		25	24.2	97	23.7	95	2	80-120/14
79-01-6	Trichloroethylene	ND		25	26.6	106	23.9	96	11	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	31.1	124	30.8	123	1	71-156/21
75-01-4	Vinyl chloride	ND		25	32.9	132	32.1	128	2	69-159/18
108-05-4	Vinyl Acetate	ND		125	148	118	140	112	6	43-154/14
	m,p-Xylene	ND		50	51.9	104	49.6	99	5	79-126/15
95-47-6	o-Xylene	ND		25	25.6	102	25.0	100	2	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3562-5MS	I11228.D	1	04/23/13	WV	n/a	n/a	VI43
FA3562-5MSD	I11229.D	1	04/23/13	WV	n/a	n/a	VI43
FA3562-5	I11222.D	1	04/23/13	WV	n/a	n/a	VI43

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-4, FA3562-5, FA3562-6, FA3562-7, FA3562-8, FA3562-9, FA3562-10, FA3562-11, FA3562-12, FA3562-13

CAS No.	Surrogate Recoveries	MS	MSD	FA3562-5	Limits
1868-53-7	Dibromofluoromethane	100%	101%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	103%	103%	79-125%
2037-26-5	Toluene-D8	96%	97%	100%	85-112%
460-00-4	4-Bromofluorobenzene	83%	84%	88%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3903-2MS	B090204.D	1	04/24/13	WV	n/a	n/a	VB3692
FA3903-2MSD	B090205.D	1	04/24/13	WV	n/a	n/a	VB3692
FA3903-2 [a]	B090196.D	1	04/24/13	WV	n/a	n/a	VB3692

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-8, FA3562-10, FA3562-12, FA3562-13, FA3562-14

CAS No.	Compound	FA3903-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	115	92	108	86	6	50-147/21
107-02-8	Acrolein	ND		125	110	88	107	86	3	31-154/29
107-13-1	Acrylonitrile	ND		125	127	102	121	97	5	58-126/16
71-43-2	Benzene	ND		25	26.7	107	24.2	97	10	81-122/14
108-86-1	Bromobenzene	ND		25	23.5	94	21.5	86	9	80-121/14
74-97-5	Bromochloromethane	ND		25	25.0	100	23.7	95	5	76-123/14
75-27-4	Bromodichloromethane	ND		25	22.8	91	20.9	84	9	79-123/19
75-25-2	Bromoform	ND		25	20.8	83	20.7	83	0	66-123/21
104-51-8	n-Butylbenzene	ND		25	26.6	106	24.4	98	9	79-126/16
135-98-8	sec-Butylbenzene	ND		25	28.1	112	25.9	104	8	83-133/16
98-06-6	tert-Butylbenzene	ND		25	24.6	98	22.7	91	8	80-133/16
108-90-7	Chlorobenzene	ND		25	25.7	103	24.8	99	4	82-124/14
75-00-3	Chloroethane	ND		25	26.2	105	20.7	83	23*	62-144/20
67-66-3	Chloroform	ND		25	22.4	90	20.6	82	8	80-124/15
95-49-8	o-Chlorotoluene	ND		25	25.9	104	23.3	93	11	81-127/15
106-43-4	p-Chlorotoluene	ND		25	26.4	106	23.6	94	11	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		125	118	94	110	88	7	56-122/23
75-15-0	Carbon disulfide	ND		25	32.6	130	29.7	119	9	66-148/23
56-23-5	Carbon tetrachloride	ND		25	22.5	90	22.2	89	1	76-136/23
75-34-3	1,1-Dichloroethane	ND		25	25.1	100	22.8	91	10	81-122/15
75-35-4	1,1-Dichloroethylene	ND		25	27.6	110	25.7	103	7	78-137/18
563-58-6	1,1-Dichloropropene	ND		25	24.9	100	23.0	92	8	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	21.8	87	20.0	80	9	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	23.9	96	23.2	93	3	75-120/13
107-06-2	1,2-Dichloroethane	ND		25	21.4	86	20.2	81	6	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	26.1	104	23.8	95	9	76-124/14
142-28-9	1,3-Dichloropropane	ND		25	24.3	97	23.4	94	4	80-118/13
594-20-7	2,2-Dichloropropane	ND		25	23.3	93	21.3	85	9	74-139/17
124-48-1	Dibromochloromethane	ND		25	23.2	93	22.4	90	4	78-122/19
75-71-8	Dichlorodifluoromethane	ND		25	34.7	139	38.2	153	10	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND		25	24.7	99	22.6	90	9	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	22.8	91	21.5	86	6	75-118/23
541-73-1	m-Dichlorobenzene	ND		25	26.3	105	23.6	94	11	84-125/14
95-50-1	o-Dichlorobenzene	ND		25	25.8	103	23.4	94	10	82-124/14
106-46-7	p-Dichlorobenzene	ND		25	23.3	93	21.4	86	9	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	25.1	100	23.7	95	6	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3903-2MS	B090204.D	1	04/24/13	WV	n/a	n/a	VB3692
FA3903-2MSD	B090205.D	1	04/24/13	WV	n/a	n/a	VB3692
FA3903-2 [a]	B090196.D	1	04/24/13	WV	n/a	n/a	VB3692

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-8, FA3562-10, FA3562-12, FA3562-13, FA3562-14

CAS No.	Compound	FA3903-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		25	22.6	90	22.4	90	1	80-120/22
100-41-4	Ethylbenzene	ND		25	25.5	102	23.7	95	7	81-121/14
591-78-6	2-Hexanone	ND		125	131	105	124	99	5	61-129/18
87-68-3	Hexachlorobutadiene	ND		25	24.3	97	21.3	85	13	75-142/19
110-54-3	Hexane	ND		25	30.0	120	29.0	116	3	69-132/20
98-82-8	Isopropylbenzene	ND		25	26.6	106	24.5	98	8	83-132/15
99-87-6	p-Isopropyltoluene	ND		25	27.1	108	24.3	97	11	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		125	131	105	122	98	7	66-122/16
74-83-9	Methyl bromide	ND		25	24.4	98	21.8	87	11	59-143/19
74-87-3	Methyl chloride	ND		25	27.2	109	25.5	102	6	50-159/19
74-95-3	Methylene bromide	ND		25	22.9	92	22.3	89	3	78-119/14
75-09-2	Methylene chloride	ND		25	27.7	111	25.6	102	8	69-135/16
78-93-3	Methyl ethyl ketone	ND		125	128	102	119	95	7	56-143/18
1634-04-4	Methyl Tert Butyl Ether	ND		25	20.3	81	19.7	79	3	72-117/14
91-20-3	Naphthalene	ND		25	23.3	93	21.8	87	7	63-132/25
103-65-1	n-Propylbenzene	ND		25	27.0	108	25.2	101	7	82-133/15
100-42-5	Styrene	ND		25	24.7	99	23.3	93	6	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		25	23.1	92	23.1	92	0	77-122/19
71-55-6	1,1,1-Trichloroethane	ND		25	22.3	89	21.4	86	4	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	24.8	99	23.4	94	6	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		25	24.4	98	23.5	94	4	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	22.6	90	21.0	84	7	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		25	23.0	92	22.3	89	3	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		25	23.6	94	21.3	85	10	73-129/20
95-63-6	1,2,4-Trimethylbenzene	ND		25	24.8	99	22.4	90	10	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		25	24.7	99	22.2	89	11	79-120/19
127-18-4	Tetrachloroethylene	ND		25	24.1	96	22.8	91	6	76-135/16
108-88-3	Toluene	ND		25	25.6	102	23.6	94	8	80-120/14
79-01-6	Trichloroethylene	ND		25	25.6	102	23.5	94	9	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	26.3	105	26.1	104	1	71-156/21
75-01-4	Vinyl chloride	ND		25	28.3	113	26.0	104	8	69-159/18
108-05-4	Vinyl Acetate	ND		125	133	106	123	98	8	43-154/14
	m,p-Xylene	ND		50	50.4	101	48.0	96	5	79-126/15
95-47-6	o-Xylene	ND		25	25.8	103	24.5	98	5	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3903-2MS	B090204.D	1	04/24/13	WV	n/a	n/a	VB3692
FA3903-2MSD	B090205.D	1	04/24/13	WV	n/a	n/a	VB3692
FA3903-2 [a]	B090196.D	1	04/24/13	WV	n/a	n/a	VB3692

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-8, FA3562-10, FA3562-12, FA3562-13, FA3562-14

CAS No.	Surrogate Recoveries	MS	MSD	FA3903-2	Limits
1868-53-7	Dibromofluoromethane	99%	102%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	88%	89%	86%	79-125%
2037-26-5	Toluene-D8	101%	100%	101%	85-112%
460-00-4	4-Bromofluorobenzene	98%	98%	98%	83-118%

(a) Sample was not preserved to a pH < 2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3802-1MS	M65617.D	5	04/25/13	RB	n/a	n/a	VM2755
FA3802-1MSD	M65618.D	5	04/25/13	RB	n/a	n/a	VM2755
FA3802-1	M65613.D	5	04/25/13	RB	n/a	n/a	VM2755

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-11

CAS No.	Compound	FA3802-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	130	U	625	296	47*	355	57	18	50-147/21

CAS No.	Surrogate Recoveries	MS	MSD	FA3802-1	Limits
1868-53-7	Dibromofluoromethane	101%	102%	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	104%	104%	79-125%
2037-26-5	Toluene-D8	100%	100%	98%	85-112%
460-00-4	4-Bromofluorobenzene	100%	100%	102%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3903-4MS	B090227.D	10	04/25/13	WV	n/a	n/a	VB3693
FA3903-4MSD	B090228.D	10	04/25/13	WV	n/a	n/a	VB3693
FA3903-4 [a]	B090218.D	10	04/25/13	WV	n/a	n/a	VB3693

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-6

CAS No.	Compound	FA3903-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD

CAS No.	Surrogate Recoveries	MS	MSD	FA3903-4	Limits
1868-53-7	Dibromofluoromethane	102%	99%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	88%	92%	96%	79-125%
2037-26-5	Toluene-D8	102%	101%	102%	85-112%
460-00-4	4-Bromofluorobenzene	96%	100%	100%	83-118%

(a) Sample was not preserved to a pH < 2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3802-14MS	I11295.D	1	04/25/13	WV	n/a	n/a	VI45
FA3802-14MSD	I11296.D	1	04/25/13	WV	n/a	n/a	VI45
FA3802-14	I11300.D	1	04/25/13	WV	n/a	n/a	VI45

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3562-9

CAS No.	Compound	FA3802-14 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25	U	125	64.7	52	77.3	62	18	50-147/21

CAS No.	Surrogate Recoveries	MS	MSD	FA3802-14	Limits
1868-53-7	Dibromofluoromethane	101%	101%	106%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	100%	103%	79-125%
2037-26-5	Toluene-D8	91%	91%	100%	85-112%
460-00-4	4-Bromofluorobenzene	94%	94%	98%	83-118%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46423-MB	X027940.D	1	04/16/13	FS	04/12/13	OP46423	SX1343

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46423-MB	X027940.D	1	04/16/13	FS	04/12/13	OP46423	SX1343

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46423-MB	X027940.D	1	04/16/13	FS	04/12/13	OP46423	SX1343

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	47%	14-67%
4165-62-2	Phenol-d5	34%	10-50%
118-79-6	2,4,6-Tribromophenol	79%	33-118%
4165-60-0	Nitrobenzene-d5	76%	42-108%
321-60-8	2-Fluorobiphenyl	71%	40-106%
1718-51-0	Terphenyl-d14	89%	39-121%

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46423-BS	X027939.D	1	04/16/13	FS	04/12/13	OP46423	SX1343

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	33.5	34	10-69
95-57-8	2-Chlorophenol	50	39.7	79	52-98
59-50-7	4-Chloro-3-methyl phenol	50	44.5	89	54-103
120-83-2	2,4-Dichlorophenol	50	45.7	91	53-103
105-67-9	2,4-Dimethylphenol	50	39.5	79	43-90
51-28-5	2,4-Dinitrophenol	100	81.8	82	44-112
534-52-1	4,6-Dinitro-o-cresol	100	90.2	90	66-121
95-48-7	2-Methylphenol	50	35.0	70	43-90
	3&4-Methylphenol	100	65.6	66	36-88
88-75-5	2-Nitrophenol	50	43.9	88	53-102
100-02-7	4-Nitrophenol	100	43.8	44	18-62
87-86-5	Pentachlorophenol	100	104	104	61-115
108-95-2	Phenol	50	17.5	35	19-56
95-95-4	2,4,5-Trichlorophenol	50	47.4	95	62-109
88-06-2	2,4,6-Trichlorophenol	50	46.7	93	59-107
83-32-9	Acenaphthene	70	61.5	88	61-107
208-96-8	Acenaphthylene	50	45.4	91	60-104
62-53-3	Aniline	50	36.9	74	47-100
120-12-7	Anthracene	70	62.5	89	65-108
92-87-5	Benzidine	50	36.0	72	25-99
56-55-3	Benzo(a)anthracene	70	62.7	90	66-111
50-32-8	Benzo(a)pyrene	70	61.0	87	62-107
205-99-2	Benzo(b)fluoranthene	70	65.2	93	65-114
191-24-2	Benzo(g,h,i)perylene	70	66.2	95	66-116
207-08-9	Benzo(k)fluoranthene	70	64.1	92	65-114
101-55-3	4-Bromophenyl phenyl ether	50	48.5	97	65-109
85-68-7	Butyl benzyl phthalate	50	44.7	89	65-112
100-51-6	Benzyl Alcohol	50	37.8	76	46-94
91-58-7	2-Chloronaphthalene	50	45.0	90	57-103
106-47-8	4-Chloroaniline	50	42.8	86	49-105
86-74-8	Carbazole	50	45.3	91	59-113
218-01-9	Chrysene	70	63.1	90	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	42.5	85	51-102
111-44-4	bis(2-Chloroethyl)ether	50	39.4	79	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	35.9	72	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	47.0	94	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46423-BS	X027939.D	1	04/16/13	FS	04/12/13	OP46423	SX1343

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	40.4	81	48-97
122-66-7	1,2-Diphenylhydrazine	50	41.4	83	61-110
541-73-1	1,3-Dichlorobenzene	50	39.4	79	45-95
106-46-7	1,4-Dichlorobenzene	50	39.8	80	45-98
121-14-2	2,4-Dinitrotoluene	50	45.5	91	61-110
606-20-2	2,6-Dinitrotoluene	50	46.5	93	63-108
91-94-1	3,3'-Dichlorobenzidine	50	43.3	87	46-117
53-70-3	Dibenzo(a,h)anthracene	70	68.2	97	66-119
132-64-9	Dibenzofuran	50	45.7	91	61-106
84-74-2	Di-n-butyl phthalate	50	43.6	87	65-107
117-84-0	Di-n-octyl phthalate	50	43.5	87	62-118
84-66-2	Diethyl phthalate	50	45.4	91	64-108
131-11-3	Dimethyl phthalate	50	45.5	91	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	43.9	88	61-117
206-44-0	Fluoranthene	50	46.4	93	63-106
86-73-7	Fluorene	70	63.2	90	62-108
118-74-1	Hexachlorobenzene	50	47.3	95	63-108
87-68-3	Hexachlorobutadiene	50	44.5	89	42-102
77-47-4	Hexachlorocyclopentadiene	50	34.0	68	39-102
67-72-1	Hexachloroethane	50	39.0	78	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	70	67.2	96	64-119
78-59-1	Isophorone	50	35.4	71	43-87
90-12-0	1-Methylnaphthalene	50	45.8	92	53-102
91-57-6	2-Methylnaphthalene	50	44.4	89	51-102
88-74-4	2-Nitroaniline	50	52.1	104	54-128
99-09-2	3-Nitroaniline	50	40.2	80	56-106
100-01-6	4-Nitroaniline	50	46.1	92	55-120
91-20-3	Naphthalene	50	43.5	87	47-100
98-95-3	Nitrobenzene	50	41.6	83	50-104
62-75-9	N-Nitrosodimethylamine	50	23.1	46	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	38.8	78	52-104
86-30-6	N-Nitrosodiphenylamine	50	46.2	92	64-108
85-01-8	Phenanthrene	70	62.9	90	66-110
129-00-0	Pyrene	70	63.0	90	64-113
110-86-1	Pyridine	50	22.7	45	23-74
120-82-1	1,2,4-Trichlorobenzene	50	43.6	87	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46423-BS	X027939.D	1	04/16/13	FS	04/12/13	OP46423	SX1343

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	48%	14-67%
4165-62-2	Phenol-d5	35%	10-50%
118-79-6	2,4,6-Tribromophenol	92%	33-118%
4165-60-0	Nitrobenzene-d5	77%	42-108%
321-60-8	2-Fluorobiphenyl	86%	40-106%
1718-51-0	Terphenyl-d14	91%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46423-MS	X027943.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
OP46423-MSD	X027944.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
FA3562-3	X027942.D	1	04/16/13	FS	04/12/13	OP46423	SX1343

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	FA3562-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		196	107	55	131	67	20	10-69/39
95-57-8	2-Chlorophenol	ND		98	76.9	78	82.7	84	7	52-98/25
59-50-7	4-Chloro-3-methyl phenol	ND		98	79.9	81	89.8	92	12	54-103/23
120-83-2	2,4-Dichlorophenol	ND		98	81.2	83	90.8	93	11	53-103/26
105-67-9	2,4-Dimethylphenol	ND		98	55.3	56	65.8	67	17	43-90/27
51-28-5	2,4-Dinitrophenol	ND		196	158	81	177	90	11	44-112/25
534-52-1	4,6-Dinitro-o-cresol	ND		196	165	84	186	95	12	66-121/23
95-48-7	2-Methylphenol	ND		98	72.0	73	81.3	83	12	43-90/28
	3&4-Methylphenol	ND		196	143	73	161	82	12	36-88/28
88-75-5	2-Nitrophenol	ND		98	78.0	80	87.5	89	11	53-102/29
100-02-7	4-Nitrophenol	ND		196	122	62	149	76*	20	18-62/33
87-86-5	Pentachlorophenol	ND		196	179	91	207	106	15	61-115/26
108-95-2	Phenol	ND		98	53.4	54	62.2	63*	15	19-56/35
95-95-4	2,4,5-Trichlorophenol	ND		98	86.4	88	95.9	98	10	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		98	82.2	84	91.2	93	10	59-107/23
83-32-9	Acenaphthene	ND		137	108	79	122	89	12	61-107/22
208-96-8	Acenaphthylene	ND		98	79.6	81	91.2	93	14	60-104/22
62-53-3	Aniline	ND		98	58.1	59	65.6	67	12	47-100/30
120-12-7	Anthracene	ND		137	104	76	115	84	10	65-108/20
92-87-5	Benzidine	ND		98	ND	0*	ND	0*	nc	25-99/31
56-55-3	Benzo(a)anthracene	ND		137	110	80	124	90	12	66-111/22
50-32-8	Benzo(a)pyrene	ND		137	97.6	71	110	80	12	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		137	116	85	128	93	10	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		137	115	84	130	95	12	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		137	114	83	128	93	12	65-114/24
101-55-3	4-Bromophenyl phenyl ether	ND		98	84.4	86	92.7	95	9	65-109/23
85-68-7	Butyl benzyl phthalate	ND		98	84.6	86	94.7	97	11	65-112/24
100-51-6	Benzyl Alcohol	ND		98	77.4	79	85.9	88	10	46-94/27
91-58-7	2-Chloronaphthalene	ND		98	78.5	80	89.2	91	13	57-103/23
106-47-8	4-Chloroaniline	ND		98	52.9	54	57.5	59	8	49-105/27
86-74-8	Carbazole	ND		98	80.9	83	90.0	92	11	59-113/21
218-01-9	Chrysene	ND		137	113	82	127	93	12	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	ND		98	76.8	78	87.8	90	13	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		98	74.8	76	83.2	85	11	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		98	71.1	73	80.8	82	13	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	ND		98	83.8	85	91.7	94	9	62-105/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46423-MS	X027943.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
OP46423-MSD	X027944.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
FA3562-3	X027942.D	1	04/16/13	FS	04/12/13	OP46423	SX1343

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	FA3562-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		98	76.3	78	82.4	84	8	48-97/24
122-66-7	1,2-Diphenylhydrazine	ND		98	79.3	81	89.0	91	12	61-110/24
541-73-1	1,3-Dichlorobenzene	ND		98	73.1	75	80.7	82	10	45-95/25
106-46-7	1,4-Dichlorobenzene	ND		98	75.1	77	82.3	84	9	45-98/25
121-14-2	2,4-Dinitrotoluene	ND		98	84.6	86	93.1	95	10	61-110/21
606-20-2	2,6-Dinitrotoluene	ND		98	83.5	85	91.7	94	9	63-108/21
91-94-1	3,3'-Dichlorobenzidine	ND		98	ND	0*	ND	0*	nc	46-117/29
53-70-3	Dibenzo(a,h)anthracene	ND		137	120	87	134	98	11	66-119/24
132-64-9	Dibenzofuran	ND		98	83.2	85	90.3	92	8	61-106/21
84-74-2	Di-n-butyl phthalate	ND		98	81.8	83	90.7	93	10	65-107/21
117-84-0	Di-n-octyl phthalate	ND		98	83.9	86	92.5	94	10	62-118/24
84-66-2	Diethyl phthalate	ND		98	83.3	85	92.8	95	11	64-108/21
131-11-3	Dimethyl phthalate	ND		98	82.4	84	90.9	93	10	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND		98	82.1	84	91.8	94	11	61-117/23
206-44-0	Fluoranthene	ND		98	81.2	83	89.8	92	10	63-106/21
86-73-7	Fluorene	ND		137	112	82	124	90	10	62-108/20
118-74-1	Hexachlorobenzene	ND		98	81.6	83	92.9	95	13	63-108/22
87-68-3	Hexachlorobutadiene	ND		98	74.8	76	85.8	88	14	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND		98	66.1	67	71.8	73	8	39-102/29
67-72-1	Hexachloroethane	ND		98	75.1	77	82.3	84	9	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		137	118	86	136	99	14	64-119/24
78-59-1	Isophorone	ND		98	65.3	67	75.6	77	15	43-87/25
90-12-0	1-Methylnaphthalene	ND		98	78.1	80	90.6	92	15	53-102/27
91-57-6	2-Methylnaphthalene	ND		98	77.6	79	87.8	90	12	51-102/26
88-74-4	2-Nitroaniline	ND		98	85.6	87	94.0	96	9	54-128/24
99-09-2	3-Nitroaniline	ND		98	16.2	17*	25.0	26*	43*	56-106/27
100-01-6	4-Nitroaniline	ND		98	20.3	21*	22.7	23*	11	55-120/24
91-20-3	Naphthalene	ND		98	76.1	78	87.5	89	14	47-100/29
98-95-3	Nitrobenzene	ND		98	106	108*	119	121*	12	50-104/28
62-75-9	N-Nitrosodimethylamine	ND		98	61.1	62	68.8	70	12	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	ND		98	76.7	78	83.9	86	9	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND		98	82.9	85	89.1	91	7	64-108/23
85-01-8	Phenanthrene	ND		137	111	81	123	90	10	66-110/21
129-00-0	Pyrene	ND		137	114	83	128	93	12	64-113/23
110-86-1	Pyridine	ND		98	54.2	55	61.8	63	13	23-74/34
120-82-1	1,2,4-Trichlorobenzene	ND		98	74.3	76	85.7	87	14	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46423-MS	X027943.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
OP46423-MSD	X027944.D	1	04/16/13	FS	04/12/13	OP46423	SX1343
FA3562-3	X027942.D	1	04/16/13	FS	04/12/13	OP46423	SX1343

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Surrogate Recoveries	MS	MSD	FA3562-3	Limits
367-12-4	2-Fluorophenol	58%	66%	49%	14-67%
4165-62-2	Phenol-d5	52%*	61%*	41%	10-50%
118-79-6	2,4,6-Tribromophenol	81%	86%	90%	33-118%
4165-60-0	Nitrobenzene-d5	71%	84%	86%	42-108%
321-60-8	2-Fluorobiphenyl	74%	84%	80%	40-106%
1718-51-0	Terphenyl-d14	79%	92%	92%	39-121%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD4961-MB	CD121494.D	1	04/12/13	CP	n/a	n/a	GCD4961

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	99%	70-131%
98-08-8	aaa-Trifluorotoluene	93%	69-143%

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD4961-BS	CD121493.D	1	04/12/13	CP	n/a	n/a	GCD4961

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.394	99	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	105%	70-131%
98-08-8	aaa-Trifluorotoluene	111%	69-143%

8.2.1

8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3572-1MS	CD121505.D	1	04/12/13	CP	n/a	n/a	GCD4961
FA3572-1MSD	CD121506.D	1	04/12/13	CP	n/a	n/a	GCD4961
FA3572-1	CD121502.D	1	04/12/13	CP	n/a	n/a	GCD4961

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	FA3572-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		0.4	0.395	99	0.390	98	1	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA3572-1	Limits
460-00-4	4-Bromofluorobenzene	105%	103%	97%	70-131%
98-08-8	aaa-Trifluorotoluene	113%	109%	89%	69-143%

8.3.1

8

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46449-MB	LL47641.D	1	04/18/13	SJL	04/15/13	OP46449	GLL1799

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	73%	50-131%

9.1.1

9

Blank Spike Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46449-BS	LL47640.D	1	04/18/13	SJL	04/15/13	OP46449	GLL1799

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.872	87	56-123
	TPH (> C22-C36)	1	1.25	125	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	94%	50-131%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3562
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46449-MS	LL47659.D	1	04/19/13	SJL	04/15/13	OP46449	GLL1799
OP46449-MSD	LL47660.D	1	04/19/13	SJL	04/15/13	OP46449	GLL1799
FA3615-5	LL47658.D	1	04/19/13	SJL	04/15/13	OP46449	GLL1799

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13

CAS No.	Compound	FA3615-5 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	ND		2.13	1.88	88	1.93	91	3	56-123/33
	TPH (> C22-C36)	ND		2.13	2.31	109	2.35	110	2	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA3615-5	Limits
84-15-1	o-Terphenyl	84%	84%	82%	50-131%

9.3.1

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA3562
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP24990
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:					04/19/13		04/19/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	15	15				
Antimony	6.0	1.3	1.3				
Arsenic	10	1.6	2.5				
Barium	200	1	1				
Beryllium	4.0	.5	.5				
Cadmium	5.0	.5	.5				
Calcium	1000	50	50				
Chromium	10	1.8	2				
Cobalt	50	.5	.5				
Copper	25	1	1				
Iron	300	29	29	-4.5	<300		
Lead	5.0	1.1	1.1				
Magnesium	5000	74	74				
Manganese	15	.7	.7	-0.10	<15	0.0	<15
Molybdenum	50	.6	1				
Nickel	40	.5	.5				
Potassium	10000	200	200				
Selenium	10	2	2				
Silver	10	.5	.5				
Sodium	10000	500	500				
Strontium	10	.5	.5				
Thallium	10	1.3	1.3				
Tin	50	.7	1.8				
Titanium	10	.9	1				
Vanadium	50	.5	1				
Zinc	20	3	5				

Associated samples MP24990: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13, FA3562-1F, FA3562-3F, FA3562-5F, FA3562-7F, FA3562-9F, FA3562-11F, FA3562-13F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA3562
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP24990
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			04/19/13					04/19/13	
Metal	FA3562-1 Original	DUP	RPD	QC Limits	FA3562-1 Original	MS	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron	462	460	0.4	0-20	462	25300	26000	95.5	70-130
Lead									
Magnesium									
Manganese	782	817	4.4	0-20	782	1260	500	95.6	70-130
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP24990: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13, FA3562-1F, FA3562-3F, FA3562-5F, FA3562-7F, FA3562-9F, FA3562-11F, FA3562-13F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA3562
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP24990
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/19/13

Metal	FA3562-1 Original	MSD	Spikelot MPFLICP1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	462	24700	26000	93.2	2.4	20
Lead						
Magnesium						
Manganese	782	1230	500	89.6	2.4	20
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP24990: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13, FA3562-1F, FA3562-3F, FA3562-5F, FA3562-7F, FA3562-9F, FA3562-11F, FA3562-13F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA3562
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP24990
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/19/13

Metal	BSP Result	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	26400	26000	101.5	85-115
Lead				
Magnesium				
Manganese	517	500	103.4	85-115
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP24990: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13, FA3562-1F, FA3562-3F, FA3562-5F, FA3562-7F, FA3562-9F, FA3562-11F, FA3562-13F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA3562
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP24990
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/19/13

Metal	FA3562-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	462	451	2.2	0-10
Lead				
Magnesium				
Manganese	782	785	0.4	0-10
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP24990: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13, FA3562-1F, FA3562-3F, FA3562-5F, FA3562-7F, FA3562-9F, FA3562-11F, FA3562-13F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA3562
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP24990
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/19/13

Metal	Sample ml	Final ml	FA3562-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10	461.7	452.466	3176	0.2	150	3000	90.8	85-115
Lead										
Magnesium										
Manganese	9.8	10	781.7	766.066	806.2	0.2	2.5	50	80.3*(a)	85-115
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP24990: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13, FA3562-1F, FA3562-3F, FA3562-5F, FA3562-7F, FA3562-9F, FA3562-11F, FA3562-13F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA3562
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP21442/GN55320	2.0	0.0	mg/l	198	236	119.1*(a)	85-115%
BOD, 5 Day	GP21443/GN55303	2.0	0.0	mg/l	198	92.3	46.6*(a)	85-115%
Bromide	GP21438/GN55219	0.50	0.0	mg/l	12.5	12.5	100.0	90-110%
Bromide	GP21455/GN55253	0.50	0.0	mg/l	12.5	13.2	105.6	90-110%
Chemical Oxygen Demand	GP21467/GN55285	20	0.0	mg/l	50.0	46.9	93.8	87-122%
Chemical Oxygen Demand	GP21474/GN55305	20	0.0	mg/l	750	734	97.8	87-122%
Chloride	GP21438/GN55219	2.0	0.0	mg/l	50	52.8	105.6	90-110%
Chloride	GP21455/GN55253	2.0	0.0	mg/l	50	52.3	104.6	90-110%
Iron, Ferrous	GN55190	0.10	0.0	mg/l	.500	0.47	94.2	82-115%
Nitrogen, Ammonia	GP21485/GN55312	0.10	0.0	mg/l	2.5	2.45	98.0	90-110%
Nitrogen, Nitrate	GP21438/GN55219	0.10	0.0	mg/l	2.5	2.39	95.6	90-110%
Nitrogen, Nitrate	GP21455/GN55253	0.10	0.0	mg/l	2.5	2.65	106.0	90-110%
Nitrogen, Nitrite	GP21438/GN55219	0.10	0.0	mg/l	2.5	2.51	100.4	90-110%
Nitrogen, Nitrite	GP21455/GN55253	0.10	0.0	mg/l	2.5	2.74	109.6	90-110%
Nitrogen, Total Kjeldahl	GP21449/GN55282	0.53	0.0	mg/l	2.63	2.78	105.9	90-110%
Solids, Total Dissolved	GN55290	100	54.0	mg/l				
Solids, Total Dissolved	GN55315	100	35.0	mg/l				
Sulfate	GP21438/GN55219	2.0	0.0	mg/l	50	47.2	94.4	90-110%
Sulfate	GP21455/GN55253	2.0	0.0	mg/l	50	51.8	103.6	90-110%

Associated Samples:
Batch GN55190: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GN55200: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GN55290: FA3562-1, FA3562-3
Batch GN55315: FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GP21438: FA3562-1, FA3562-3, FA3562-5, FA3562-7
Batch GP21442: FA3562-1, FA3562-3, FA3562-5
Batch GP21443: FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GP21449: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GP21455: FA3562-9, FA3562-11, FA3562-13
Batch GP21467: FA3562-1, FA3562-5, FA3562-7, FA3562-11, FA3562-13
Batch GP21474: FA3562-3, FA3562-9
Batch GP21485: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
(*) Outside of QC limits
(a) Spike recovery outside of acceptable QC criteria.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA3562
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP21442/GN55320	FA3562-1	mg/l	5.7	6.5	13.1	0-30%
BOD, 5 Day	GP21443/GN55303	FA3562-11	mg/l	2.2	0.0	30.9(a)	0-30%
Iron, Ferrous	GN55190	FA3562-1	mg/l	0.11	0.098	8.5	0-31%
Solids, Total Dissolved	GN55290	FA3629-17	mg/l	250	252	0.8	0-5%
Solids, Total Dissolved	GN55315	FA3598-1	mg/l	714	708	0.8	0-5%

Associated Samples:
Batch GN55190: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GN55290: FA3562-1, FA3562-3
Batch GN55315: FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GP21442: FA3562-1, FA3562-3, FA3562-5
Batch GP21443: FA3562-7, FA3562-9, FA3562-11, FA3562-13
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA3562
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
BOD, 5 Day	GP21442/GN55320	FA3562-1	mg/l	5.7	198	13.3	96.1(a)	85-115%
BOD, 5 Day	GP21443/GN55303	FA3562-11	mg/l	2.2	198	31.6	111.4	85-115%
Bromide	GP21438/GN55253	FA3557-4	mg/l	0.37	12.5	12.6	97.8	90-110%
Bromide	GP21438/GN55308	FA3557-4	mg/l	0.37	12.5	11.9	92.2	90-110%
Bromide	GP21455/GN55253	FA3620-1	mg/l	0.12 U	12.5	12.3	98.4	90-110%
Chemical Oxygen Demand	GP21467/GN55285	FA3447-13	mg/l	44.4	50.0	93.8	98.8	87-122%
Chemical Oxygen Demand	GP21474/GN55305	FA3566-3	mg/l	828	750	1660	110.0	87-122%
Chloride	GP21438/GN55253	FA3557-4	mg/l	20.4	50	70.9	101.0	90-110%
Chloride	GP21438/GN55308	FA3557-4	mg/l	20.4	50	70.2	99.6	90-110%
Chloride	GP21455/GN55253	FA3620-1	mg/l	12.9	50	65.5	105.2	90-110%
Nitrogen, Ammonia	GP21485/GN55312	FA3568-1	mg/l	10.0	2.5	12.3	92.0	90-110%
Nitrogen, Nitrate	GP21438/GN55308	FA3557-4	mg/l	0.050 U	2.5	2.5	100.0	90-110%
Nitrogen, Nitrate	GP21455/GN55253	FA3620-1	mg/l	0.050 U	2.5	2.7	108.0	90-110%
Nitrogen, Nitrite	GP21438/GN55253	FA3557-4	mg/l	0.050 U	2.5	2.5	100.0	90-110%
Nitrogen, Nitrite	GP21438/GN55308	FA3557-4	mg/l	0.050 U	2.5	2.4	96.0	90-110%
Nitrogen, Nitrite	GP21455/GN55253	FA3620-1	mg/l	0.050 U	2.5	2.7	108.0	90-110%
Nitrogen, Total Kjeldahl	GP21449/GN55282	FA3562-1	mg/l	3.8	2.63	6.2	91.4	90-110%
Sulfate	GP21438/GN55253	FA3557-4	mg/l	1.6	50	50.9	98.6	90-110%
Sulfate	GP21438/GN55308	FA3557-4	mg/l	1.6	50	50.3	97.4	90-110%
Sulfate	GP21455/GN55253	FA3620-1	mg/l	13.7	50	64.7	102.0	90-110%

Associated Samples:
Batch GN55200: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GP21438: FA3562-1, FA3562-3, FA3562-5, FA3562-7
Batch GP21442: FA3562-1, FA3562-3, FA3562-5
Batch GP21443: FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GP21449: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GP21455: FA3562-9, FA3562-11, FA3562-13
Batch GP21467: FA3562-1, FA3562-5, FA3562-7, FA3562-11, FA3562-13
Batch GP21474: FA3562-3, FA3562-9
Batch GP21485: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Oxygen depletion outside of method acceptance criteria at the dilutions analyzed.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA3562
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP21438/GN55253	FA3557-4	mg/l	0.37	12.5	12.7	0.8	20%
Bromide	GP21438/GN55308	FA3557-4	mg/l	0.37	12.5	11.9	0.0	20%
Bromide	GP21455/GN55253	FA3620-1	mg/l	0.12 U	12.5	12.3	0.0	20%
Chemical Oxygen Demand	GP21467/GN55285	FA3447-13	mg/l	44.4	50.0	91.4	2.7	26%
Chemical Oxygen Demand	GP21474/GN55305	FA3566-3	mg/l	828	750	1660	0.0	26%
Chloride	GP21438/GN55253	FA3557-4	mg/l	20.4	50	70.8	0.1	20%
Chloride	GP21438/GN55308	FA3557-4	mg/l	20.4	50	70.3	0.1	20%
Chloride	GP21455/GN55253	FA3620-1	mg/l	12.9	50	65.4	0.2	20%
Nitrogen, Ammonia	GP21485/GN55312	FA3568-1	mg/l	10.0	2.5	12.1	1.6	20%
Nitrogen, Nitrate	GP21438/GN55308	FA3557-4	mg/l	0.050 U	2.5	2.5	0.0	20%
Nitrogen, Nitrate	GP21455/GN55253	FA3620-1	mg/l	0.050 U	2.5	2.7	0.0	20%
Nitrogen, Nitrite	GP21438/GN55253	FA3557-4	mg/l	0.050 U	2.5	2.5	0.0	20%
Nitrogen, Nitrite	GP21438/GN55308	FA3557-4	mg/l	0.050 U	2.5	2.4	0.0	20%
Nitrogen, Nitrite	GP21455/GN55253	FA3620-1	mg/l	0.050 U	2.5	2.6	3.8	20%
Nitrogen, Total Kjeldahl	GP21449/GN55282	FA3562-1	mg/l	3.8	2.63	6.5	4.7	20%
Sulfate	GP21438/GN55253	FA3557-4	mg/l	1.6	50	50.8	0.2	20%
Sulfate	GP21438/GN55308	FA3557-4	mg/l	1.6	50	50.4	0.2	20%
Sulfate	GP21455/GN55253	FA3620-1	mg/l	13.7	50	64.7	0.0	20%

Associated Samples:
Batch GN55200: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GP21438: FA3562-1, FA3562-3, FA3562-5, FA3562-7
Batch GP21449: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
Batch GP21455: FA3562-9, FA3562-11, FA3562-13
Batch GP21467: FA3562-1, FA3562-5, FA3562-7, FA3562-11, FA3562-13
Batch GP21474: FA3562-3, FA3562-9
Batch GP21485: FA3562-1, FA3562-3, FA3562-5, FA3562-7, FA3562-9, FA3562-11, FA3562-13
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Southeast
ACCUTEST LABORATORIES

06/26/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA3615

Sampling Date: 04/10/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **114**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

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Accutest LabLink@143056 11:18 26-Jun-2013

Sample Summary

Bhate Environmental

Job No: FA3615

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA3615-1	04/10/13	13:20	MLP	04/12/13	AQ	Ground Water	SS61-MW21
FA3615-1F	04/10/13	13:20	MLP	04/12/13	AQ	Groundwater Filtered	SS61-MW21
FA3615-2	04/10/13	00:00	MLP	04/12/13	AQ	Trip Blank Water	TRIP BLANK
FA3615-3	04/10/13	15:10	MLP	04/12/13	AQ	Ground Water	SS61-MW26
FA3615-3F	04/10/13	15:10	MLP	04/12/13	AQ	Groundwater Filtered	SS61-MW26
FA3615-4	04/10/13	00:00	MLP	04/12/13	AQ	Trip Blank Water	TRIP BLANK
FA3615-5	04/10/13	15:25	MLP	04/12/13	AQ	Ground Water	SS61-MW23
FA3615-5F	04/10/13	15:25	MLP	04/12/13	AQ	Groundwater Filtered	SS61-MW23
FA3615-6	04/10/13	00:00	MLP	04/12/13	AQ	Trip Blank Water	TRIP BLANK
FA3615-7	04/10/13	17:10	MLP	04/12/13	AQ	Ground Water	SS61-MW24
FA3615-7F	04/10/13	17:10	MLP	04/12/13	AQ	Groundwater Filtered	SS61-MW24
FA3615-8	04/10/13	00:00	MLP	04/12/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA3615

Site: Holloman AFB; SS61 VCM **Report Date** 4/26/2013 1:20:13 PM

4 Samples and 1 Trip Blank were collected on 04/10/2013 and were received at Accutest SE on 04/12/2013 properly preserved, at 1.8 Deg. C and intact. These Samples received an Accutest job number of FA3615. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VZ653

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3691-3MS, FA3691-3MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, o-Dichlorobenzene are outside control limits.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, cis-1,3-Dichloropropene are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,2,3-Trichlorobenzene, 2-Chloroethyl vinyl ether, cis-1,3-Dichloropropene, Naphthalene, trans-1,3-Dichloropropene are outside control limits. Probable cause is due to matrix interference.

FA3615-1 for 1,2,3-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-1 for 1,2,4-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-1 for o-Dichlorobenzene: Associated BS recovery outside control limits.

FA3615-2 for 1,2,3-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-2 for 1,2,4-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-2 for o-Dichlorobenzene: Associated BS recovery outside control limits.

FA3615-3 for 1,2,3-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-3 for 1,2,4-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-3 for o-Dichlorobenzene: Associated BS recovery outside control limits.

FA3615-4 for 1,2,3-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-4 for 1,2,4-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-4 for o-Dichlorobenzene: Associated BS recovery outside control limits.

FA3615-5 for 1,2,3-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-5 for 1,2,4-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-5 for o-Dichlorobenzene: Associated BS recovery outside control limits.

FA3615-6 for 1,2,3-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-6 for 1,2,4-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-6 for o-Dichlorobenzene: Associated BS recovery outside control limits.

FA3615-7 for 1,2,3-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-7 for 1,2,4-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-7 for o-Dichlorobenzene: Associated BS recovery outside control limits.

FA3615-8 for 1,2,3-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-8 for 1,2,4-Trichlorobenzene: Associated BS recovery outside control limits.

FA3615-8 for o-Dichlorobenzene: Associated BS recovery outside control limits.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP46438

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3615-1MS, FA3615-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 4-Nitrophenol are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Sample(s) OP46438-MS has surrogates outside control limits. Probable cause is due to matrix interference.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD4962

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3608-2MS, FA3608-2MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP46449

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3615-5MS, FA3615-5MSD were used as the QC samples indicated.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP25000

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3615-1DUP, FA3615-1MS, FA3615-1MSD, FA3615-1PS, FA3615-1SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Manganese are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP21454

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3568-3MS, FA3568-3MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

Matrix Spike Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

FA3615-3 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA3615-5 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA3615-7 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Matrix: AQ **Batch ID:** GP21455

All method blanks for this batch meet method specific criteria.

Sample(s) FA3620-1MS, FA3620-1MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA3615-1 for Nitrogen, Nitrate: Sample analyzed beyond hold time due to instrument error.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP21514

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3615-3MS, FA3615-3MSD were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP21510

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3568-1MS, FA3568-1MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Matrix Spike Recovery(s) for Nitrogen, Total Kjeldahl are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN55214

All method blanks for this batch meet method specific criteria.

Sample(s) FA3608-2DUP was used as the QC samples for Iron, Ferrous.

FA3615-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA3615-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA3615-5 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA3615-7 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R30225

FA3615-7 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R30226

FA3615-5 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R30227

FA3615-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R30228

FA3615-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN55315

All method blanks for this batch meet method specific criteria.

Sample(s) FA3598-1DUP was used as the QC samples for Solids, Total Dissolved.

The following samples were run outside of holding time for method SM19 2540C: FA3615-1, FA3615-3, FA3615-5, FA3615-7. Samples analyzed beyond hold time due to laboratory error.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP21443

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA3562-11MS, FA3562-11DUP were used as the QC samples for BOD, 5 Day.

Blank Spike Recovery(s) for BOD, 5 Day are outside control limits.

RPD(s) for Duplicate for BOD, 5 Day are outside control limits for sample GP21443-D1. RPD acceptable due to low duplicate and sample concentrations.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP21475

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s FA3655-1MS, FA3655-1MSD were used as the QC samples for Chemical Oxygen Demand.

Matrix Spike Recovery(s) for Chemical Oxygen Demand are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: April 26, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA3615
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/10/13

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Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA3615-1	**SS61-MW21**					
Benzene		176	10	2.1	ug/l	SW846 8260B
sec-Butylbenzene		1.9	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		2.9	1.0	0.29	ug/l	SW846 8260B
1,1-Dichloroethane		0.32 J	1.0	0.21	ug/l	SW846 8260B
1,2-Dichloroethane		0.28 J	1.0	0.22	ug/l	SW846 8260B
m-Dichlorobenzene		2.2	1.0	0.25	ug/l	SW846 8260B
o-Dichlorobenzene [a]		8.5	1.0	0.22	ug/l	SW846 8260B
p-Dichlorobenzene		2.7	1.0	0.20	ug/l	SW846 8260B
Ethylbenzene		92.7	10	2.9	ug/l	SW846 8260B
Isopropylbenzene		223	10	2.0	ug/l	SW846 8260B
4-Methyl-2-pentanone		2.8 J	5.0	2.3	ug/l	SW846 8260B
n-Propylbenzene		14.8	1.0	0.23	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		5.5	2.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		0.32 J	2.0	0.20	ug/l	SW846 8260B
Toluene		15.2	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene		32.4	2.0	0.30	ug/l	SW846 8260B
o-Xylene		12.1	1.0	0.20	ug/l	SW846 8260B
Phenol		2.1 J	5.4	0.59	ug/l	SW846 8270D
1,2-Dichlorobenzene		5.7	5.4	0.73	ug/l	SW846 8270D
1,3-Dichlorobenzene		1.7 J	5.4	0.83	ug/l	SW846 8270D
1,4-Dichlorobenzene		2.2 J	5.4	0.74	ug/l	SW846 8270D
TPH-GRO (C6-C10)		1.41	0.20	0.10	mg/l	SW846 8015C
TPH (C10-C22)		0.166 J	0.26	0.10	mg/l	SW846 8015C
Iron		2670	300	29	ug/l	EPA 200.7
Manganese		1590	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		5.6	4.0	2.0	mg/l	SM19 5210B
Chemical Oxygen Demand		34.4	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		6.3	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [b]		2.2	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [c]		0.52	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		3.2	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved [d]		5620	500	50	mg/l	SM19 2540C
Sulfate		3530	100	30	mg/l	EPA 300/SW846 9056A
FA3615-1F	**SS61-MW21**					
Manganese		1460	15	0.70	ug/l	EPA 200.7
FA3615-2	**TRIP BLANK**					

No hits reported in this sample.

Summary of Hits

Job Number: FA3615
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/10/13

3

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA3615-3	**SS61-MW26**					
Benzene		21.8	1.0	0.21	ug/l	SW846 8260B
Ethylbenzene		5.8	1.0	0.29	ug/l	SW846 8260B
Isopropylbenzene		11.6	1.0	0.20	ug/l	SW846 8260B
n-Propylbenzene		0.31 J	1.0	0.23	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		1.6 J	2.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		0.20 J	2.0	0.20	ug/l	SW846 8260B
Toluene		1.7	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene		8.0	2.0	0.30	ug/l	SW846 8260B
o-Xylene		4.6	1.0	0.20	ug/l	SW846 8260B
2,4-Dimethylphenol		9.7	4.9	0.74	ug/l	SW846 8270D
2-Methylphenol		1.1 J	4.9	0.70	ug/l	SW846 8270D
Phenol		5.5	4.9	0.53	ug/l	SW846 8270D
TPH-GRO (C6-C10)		0.157	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		0.394	0.25	0.10	mg/l	SW846 8015C
Iron		189 J	300	29	ug/l	EPA 200.7
Manganese		69.4	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		3.0 J	8.0	2.0	mg/l	SM19 5210B
Chemical Oxygen Demand		9.8 J	20	5.3	mg/l	SM19 5220C
Iron, Ferric [b]		0.19 J	0.40	0.059	mg/l	SM18 3500FED M
Nitrogen, Total Kjeldahl		2.7	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved [d]		4380	500	50	mg/l	SM19 2540C
Sulfate		3090	100	30	mg/l	EPA 300/SW846 9056A
FA3615-3F	**SS61-MW26**					
Manganese		81.7	15	0.70	ug/l	EPA 200.7
FA3615-4	**TRIP BLANK**					
Methylene chloride		2.1 J	5.0	2.0	ug/l	SW846 8260B
FA3615-5	**SS61-MW23**					
tert-Butylbenzene		1.2	1.0	0.29	ug/l	SW846 8260B
Chloroform		0.27 J	1.0	0.26	ug/l	SW846 8260B
Phenol		1.2 J	5.4	0.59	ug/l	SW846 8270D
TPH-GRO (C6-C10)		0.355	0.10	0.050	mg/l	SW846 8015C
Iron		1650	300	29	ug/l	EPA 200.7
Manganese		554	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		12.3 J	20	5.3	mg/l	SM19 5220C
Iron, Ferric [b]		1.5	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [c]		0.18	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.045 J	0.10	0.030	mg/l	EPA 350.1

Summary of Hits

Job Number: FA3615
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/10/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Nitrogen, Total Kjeldahl		2.9	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved [d]		5200	500	50	mg/l	SM19 2540C
Sulfate		3340	100	30	mg/l	EPA 300/SW846 9056A
FA3615-5F	**SS61-MW23**					
Manganese		482	15	0.70	ug/l	EPA 200.7
FA3615-6	**TRIP BLANK**					
Methylene chloride		2.2 J	5.0	2.0	ug/l	SW846 8260B
Toluene		0.88 J	1.0	0.20	ug/l	SW846 8260B
FA3615-7	**SS61-MW24**					
Benzene		19.1	1.0	0.21	ug/l	SW846 8260B
n-Butylbenzene		0.26 J	1.0	0.20	ug/l	SW846 8260B
sec-Butylbenzene		4.9	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		5.3	1.0	0.29	ug/l	SW846 8260B
Carbon disulfide		0.83 J	2.0	0.49	ug/l	SW846 8260B
m-Dichlorobenzene		0.75 J	1.0	0.25	ug/l	SW846 8260B
o-Dichlorobenzene [a]		2.8	1.0	0.22	ug/l	SW846 8260B
p-Dichlorobenzene		0.92 J	1.0	0.20	ug/l	SW846 8260B
Ethylbenzene		242	10	2.9	ug/l	SW846 8260B
Isopropylbenzene		542	10	2.0	ug/l	SW846 8260B
p-Isopropyltoluene		0.52 J	1.0	0.20	ug/l	SW846 8260B
4-Methyl-2-pentanone		3.9 J	5.0	2.3	ug/l	SW846 8260B
Naphthalene		2.5 J	5.0	1.0	ug/l	SW846 8260B
n-Propylbenzene		30.2	1.0	0.23	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		72.7	20	2.0	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		6.1	2.0	0.20	ug/l	SW846 8260B
Toluene		13.4	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene		165	20	3.0	ug/l	SW846 8260B
o-Xylene		91.9	1.0	0.20	ug/l	SW846 8260B
2,4-Dimethylphenol		10.8	4.8	0.74	ug/l	SW846 8270D
1,2-Dichlorobenzene		1.8 J	4.8	0.65	ug/l	SW846 8270D
Naphthalene		1.8 J	4.8	0.61	ug/l	SW846 8270D
TPH-GRO (C6-C10)		3.29	1.0	0.50	mg/l	SW846 8015C
TPH (C10-C22)		3.16	1.2	0.48	mg/l	SW846 8015C
Iron		743	300	29	ug/l	EPA 200.7
Manganese		263	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		5.2	4.0	2.0	mg/l	SM19 5210B
Chemical Oxygen Demand		36.8	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		0.79 J	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [b]		0.74	0.40	0.059	mg/l	SM18 3500FED M

Summary of Hits

Job Number: FA3615
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 04/10/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Nitrogen, Total Kjeldahl		2.9	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved [d]		5370	500	50	mg/l	SM19 2540C
Sulfate		3440	100	30	mg/l	EPA 300/SW846 9056A
FA3615-7F	**SS61-MW24**					
Manganese		231	15	0.70	ug/l	EPA 200.7
FA3615-8	**TRIP BLANK**					
Methylene chloride		2.3 J	5.0	2.0	ug/l	SW846 8260B
Toluene		0.31 J	1.0	0.20	ug/l	SW846 8260B

(a) Associated BS recovery outside control limits.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Sample analyzed beyond hold time due to laboratory error.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z15612.D	1	04/24/13	KW	n/a	n/a	VZ653
Run #2	Z15620.D	10	04/24/13	KW	n/a	n/a	VZ653

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	176 [a]	10	2.1	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	1.9	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	2.9	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	0.32	1.0	0.21	ug/l	J
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.28	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	2.2	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene [b]	8.5	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	2.7	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	92.7 [a]	10	2.9	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	223 [a]	10	2.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	2.8	5.0	2.3	ug/l	J
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	14.8	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene [b]	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene [b]	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	5.5	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.32	2.0	0.20	ug/l	J
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	15.2	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	32.4	2.0	0.30	ug/l	
95-47-6	o-Xylene	12.1	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%	88%	83-118%
17060-07-0	1,2-Dichloroethane-D4	95%	98%	79-125%
2037-26-5	Toluene-D8	92%	101%	85-112%
460-00-4	4-Bromofluorobenzene	96%	97%	83-118%

(a) Result is from Run# 2
(b) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L062671.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	54	11	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	0.76	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	0.87	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	0.75	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	0.82	ug/l	
51-28-5	2,4-Dinitrophenol	ND	27	5.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	1.5	ug/l	
95-48-7	2-Methylphenol	ND	5.4	0.78	ug/l	
	3&4-Methylphenol	ND	5.4	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	27	5.4	ug/l	
87-86-5	Pentachlorophenol	ND	27	5.4	ug/l	
108-95-2	Phenol	2.1	5.4	0.59	ug/l	J
95-95-4	2,4,5-Trichlorophenol	ND	5.4	0.96	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	0.84	ug/l	
83-32-9	Acenaphthene	ND	5.4	0.75	ug/l	
208-96-8	Acenaphthylene	ND	5.4	0.75	ug/l	
62-53-3	Aniline	ND	5.4	0.84	ug/l	
120-12-7	Anthracene	ND	5.4	0.80	ug/l	
92-87-5	Benzidine	ND	27	5.4	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	0.59	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	0.61	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	0.81	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	0.71	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	0.72	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	0.85	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	0.76	ug/l	
100-51-6	Benzyl Alcohol	ND	5.4	1.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	0.78	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	0.74	ug/l	
86-74-8	Carbazole	ND	5.4	0.56	ug/l	
218-01-9	Chrysene	ND	5.4	0.63	ug/l	

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	0.75	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	0.77	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	0.85	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	0.94	ug/l	
95-50-1	1,2-Dichlorobenzene	5.7	5.4	0.73	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	0.69	ug/l	
541-73-1	1,3-Dichlorobenzene	1.7	5.4	0.83	ug/l	J
106-46-7	1,4-Dichlorobenzene	2.2	5.4	0.74	ug/l	J
121-14-2	2,4-Dinitrotoluene	ND	5.4	0.74	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.4	0.87	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	0.79	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	0.63	ug/l	
132-64-9	Dibenzofuran	ND	5.4	0.80	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	1.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	1.1	ug/l	
84-66-2	Diethyl phthalate	ND	5.4	1.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	0.87	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.4	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.4	0.63	ug/l	
86-73-7	Fluorene	ND	5.4	0.82	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	0.74	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.4	1.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.4	0.85	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.80	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	0.62	ug/l	
78-59-1	Isophorone	ND	5.4	0.69	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.4	0.76	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.4	0.74	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	0.81	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	0.70	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	1.0	ug/l	
91-20-3	Naphthalene	ND	5.4	0.68	ug/l	
98-95-3	Nitrobenzene	ND	5.4	0.77	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.4	0.67	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	0.91	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	1.1	ug/l	
85-01-8	Phenanthrene	ND	5.4	0.76	ug/l	
129-00-0	Pyrene	ND	5.4	0.73	ug/l	
110-86-1	Pyridine	ND	11	2.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.65	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		14-67%
4165-62-2	Phenol-d5	27%		10-50%
118-79-6	2,4,6-Tribromophenol	79%		33-118%
4165-60-0	Nitrobenzene-d5	63%		42-108%
321-60-8	2-Fluorobiphenyl	67%		40-106%
1718-51-0	Terphenyl-d14	79%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121527.D	2	04/15/13	CP	n/a	n/a	GCD4962
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.41	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	118%		70-131%
98-08-8	aaa-Trifluorotoluene	109%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47669.D	1	04/19/13	SJL	04/15/13	OP46449	GLL1800
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.166	0.26	0.10	mg/l	J
	TPH (> C22-C36)	ND	0.26	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	2670	300	29	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	1590	15	0.70	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP25000

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	5.6	4.0	2.0	mg/l	2	04/12/13 08:30	MG	SM19 5210B
Chemical Oxygen Demand	34.4	20	5.3	mg/l	1	04/17/13 09:10	LE	SM19 5220C
Hydrogen Sulfide	6.3	1.0	0.50	mg/l	1	04/15/13 14:02	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	2.2	0.40	0.059	mg/l	1	04/22/13 16:24	LM	SM18 3500FED M
Iron, Ferrous [b]	0.52	0.10	0.030	mg/l	1	04/12/13 15:05	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	04/23/13 13:52	VK	EPA 350.1
Nitrogen, Nitrate [c]	2.5 U	5.0	2.5	mg/l	50	04/13/13 01:54	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	3.2	0.53	0.17	mg/l	1	04/23/13 11:17	MG	EPA 351.2
Solids, Total Dissolved [d]	5620	500	50	mg/l	5	04/18/13 14:20	KC	SM19 2540C
Sulfate	3530	100	30	mg/l	50	04/13/13 01:54	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample analyzed beyond hold time due to instrument error.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA3615-1F	**Date Sampled:**	04/10/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	1460	15	0.70	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP25000

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-2	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z15623.D	1	04/24/13	KW	n/a	n/a	VZ653
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-2	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene [a]	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-2	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	92%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z15621.D	1	04/24/13	KW	n/a	n/a	VZ653
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	21.8	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene [a]	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	5.8	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	11.6	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.31	1.0	0.23	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.6	2.0	0.20	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	0.20	2.0	0.20	ug/l	J
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	1.7	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	8.0	2.0	0.30	ug/l	
95-47-6	o-Xylene	4.6	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	94%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L062674.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	49	9.7	ug/l	
95-57-8	2-Chlorophenol	ND	4.9	0.69	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.9	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.9	0.68	ug/l	
105-67-9	2,4-Dimethylphenol	9.7	4.9	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.7	1.4	ug/l	
95-48-7	2-Methylphenol	1.1	4.9	0.70	ug/l	J
	3&4-Methylphenol	ND	4.9	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.9	0.66	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.9	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.9	ug/l	
108-95-2	Phenol	5.5	4.9	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.9	0.87	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.9	0.76	ug/l	
83-32-9	Acenaphthene	ND	4.9	0.68	ug/l	
208-96-8	Acenaphthylene	ND	4.9	0.67	ug/l	
62-53-3	Aniline	ND	4.9	0.76	ug/l	
120-12-7	Anthracene	ND	4.9	0.73	ug/l	
92-87-5	Benzidine	ND	24	4.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	0.53	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	0.65	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.9	0.77	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.9	0.69	ug/l	
100-51-6	Benzyl Alcohol	ND	4.9	0.97	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.9	0.71	ug/l	
106-47-8	4-Chloroaniline	ND	4.9	0.67	ug/l	
86-74-8	Carbazole	ND	4.9	0.51	ug/l	
218-01-9	Chrysene	ND	4.9	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.9	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.9	0.70	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.9	0.77	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.9	0.85	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.9	0.66	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.9	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.9	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.9	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.9	0.67	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.9	0.78	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.9	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	0.57	ug/l	
132-64-9	Dibenzofuran	ND	4.9	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.9	0.97	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.9	0.97	ug/l	
84-66-2	Diethyl phthalate	ND	4.9	0.97	ug/l	
131-11-3	Dimethyl phthalate	ND	4.9	0.78	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.9	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.9	0.57	ug/l	
86-73-7	Fluorene	ND	4.9	0.74	ug/l	
118-74-1	Hexachlorobenzene	ND	4.9	0.67	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.9	0.93	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.9	0.77	ug/l	
67-72-1	Hexachloroethane	ND	4.9	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	0.56	ug/l	
78-59-1	Isophorone	ND	4.9	0.62	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	0.67	ug/l	
88-74-4	2-Nitroaniline	ND	4.9	0.73	ug/l	
99-09-2	3-Nitroaniline	ND	4.9	0.63	ug/l	
100-01-6	4-Nitroaniline	ND	4.9	0.94	ug/l	
91-20-3	Naphthalene	ND	4.9	0.62	ug/l	
98-95-3	Nitrobenzene	ND	4.9	0.70	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.9	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.9	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.9	0.97	ug/l	
85-01-8	Phenanthrene	ND	4.9	0.68	ug/l	
129-00-0	Pyrene	ND	4.9	0.66	ug/l	
110-86-1	Pyridine	ND	9.7	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.59	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		14-67%
4165-62-2	Phenol-d5	26%		10-50%
118-79-6	2,4,6-Tribromophenol	80%		33-118%
4165-60-0	Nitrobenzene-d5	62%		42-108%
321-60-8	2-Fluorobiphenyl	68%		40-106%
1718-51-0	Terphenyl-d14	79%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121528.D	1	04/15/13	CP	n/a	n/a	GCD4962
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.157	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		70-131%
98-08-8	aaa-Trifluorotoluene	90%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47657.D	1	04/19/13	SJL	04/15/13	OP46449	GLL1799
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.394	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	189 J	300	29	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	69.4	15	0.70	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP25000

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	3.0 J	8.0	2.0	mg/l	4	04/12/13 08:30	MG	SM19 5210B
Chemical Oxygen Demand	9.8 J	20	5.3	mg/l	1	04/17/13 09:10	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	04/15/13 14:02	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.19 J	0.40	0.059	mg/l	1	04/22/13 16:59	LM	SM18 3500FED M
Iron, Ferrous [b]	0.030 U	0.10	0.030	mg/l	1	04/12/13 15:05	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	04/23/13 13:46	VK	EPA 350.1
Nitrogen, Nitrate [c]	1.3 U	2.5	1.3	mg/l	25	04/12/13 15:03	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	2.7	0.53	0.17	mg/l	1	04/23/13 11:18	MG	EPA 351.2
Solids, Total Dissolved [d]	4380	500	50	mg/l	5	04/18/13 14:20	KC	SM19 2540C
Sulfate	3090	100	30	mg/l	50	04/15/13 16:10	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA3615-3F	**Date Sampled:**	04/10/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	81.7	15	0.70	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP25000

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-4	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z15617.D	1	04/24/13	KW	n/a	n/a	VZ653
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-4	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene [a]	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.1	5.0	2.0	ug/l	J
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-4	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	93%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z15614.D	1	04/24/13	KW	n/a	n/a	VZ653
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	1.2	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	0.27	1.0	0.26	ug/l	J
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene [a]	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L062675.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	54	11	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	0.76	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	0.87	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	0.75	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	0.82	ug/l	
51-28-5	2,4-Dinitrophenol	ND	27	5.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	1.5	ug/l	
95-48-7	2-Methylphenol	ND	5.4	0.78	ug/l	
	3&4-Methylphenol	ND	5.4	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	27	5.4	ug/l	
87-86-5	Pentachlorophenol	ND	27	5.4	ug/l	
108-95-2	Phenol	1.2	5.4	0.59	ug/l	J
95-95-4	2,4,5-Trichlorophenol	ND	5.4	0.96	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	0.84	ug/l	
83-32-9	Acenaphthene	ND	5.4	0.75	ug/l	
208-96-8	Acenaphthylene	ND	5.4	0.75	ug/l	
62-53-3	Aniline	ND	5.4	0.84	ug/l	
120-12-7	Anthracene	ND	5.4	0.80	ug/l	
92-87-5	Benzidine	ND	27	5.4	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	0.59	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	0.61	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	0.81	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	0.71	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	0.72	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	0.85	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	0.76	ug/l	
100-51-6	Benzyl Alcohol	ND	5.4	1.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	0.78	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	0.74	ug/l	
86-74-8	Carbazole	ND	5.4	0.56	ug/l	
218-01-9	Chrysene	ND	5.4	0.63	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	0.75	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	0.77	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	0.85	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	0.94	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.73	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	0.69	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.83	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.74	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.4	0.74	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.4	0.87	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	0.79	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	0.63	ug/l	
132-64-9	Dibenzofuran	ND	5.4	0.80	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	1.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	1.1	ug/l	
84-66-2	Diethyl phthalate	ND	5.4	1.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	0.87	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.4	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.4	0.63	ug/l	
86-73-7	Fluorene	ND	5.4	0.82	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	0.74	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.4	1.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.4	0.85	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.80	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	0.62	ug/l	
78-59-1	Isophorone	ND	5.4	0.69	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.4	0.76	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.4	0.74	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	0.81	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	0.70	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	1.0	ug/l	
91-20-3	Naphthalene	ND	5.4	0.68	ug/l	
98-95-3	Nitrobenzene	ND	5.4	0.77	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.4	0.67	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	0.91	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	1.1	ug/l	
85-01-8	Phenanthrene	ND	5.4	0.76	ug/l	
129-00-0	Pyrene	ND	5.4	0.73	ug/l	
110-86-1	Pyridine	ND	11	2.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.65	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		14-67%
4165-62-2	Phenol-d5	29%		10-50%
118-79-6	2,4,6-Tribromophenol	82%		33-118%
4165-60-0	Nitrobenzene-d5	71%		42-108%
321-60-8	2-Fluorobiphenyl	72%		40-106%
1718-51-0	Terphenyl-d14	84%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121529.D	1	04/15/13	CP	n/a	n/a	GCD4962
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.355	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	111%		70-131%
98-08-8	aaa-Trifluorotoluene	111%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47658.D	1	04/19/13	SJL	04/15/13	OP46449	GLL1799
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.28	0.11	mg/l	
	TPH (> C22-C36)	ND	0.28	0.11	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	1650	300	29	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	554	15	0.70	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP25000

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	2.0 U	4.0	2.0	mg/l	2	04/12/13 08:30	MG	SM19 5210B
Chemical Oxygen Demand	12.3 J	20	5.3	mg/l	1	04/17/13 09:10	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	04/15/13 14:02	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	1.5	0.40	0.059	mg/l	1	04/22/13 17:03	LM	SM18 3500FED M
Iron, Ferrous [b]	0.18	0.10	0.030	mg/l	1	04/12/13 15:05	LE	SM18 3500FED
Nitrogen, Ammonia	0.045 J	0.10	0.030	mg/l	1	04/23/13 13:55	VK	EPA 350.1
Nitrogen, Nitrate [c]	1.3 U	2.5	1.3	mg/l	25	04/12/13 15:18	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	2.9	0.53	0.17	mg/l	1	04/23/13 11:19	MG	EPA 351.2
Solids, Total Dissolved [d]	5200	500	50	mg/l	5	04/18/13 14:20	KC	SM19 2540C
Sulfate	3340	100	30	mg/l	50	04/15/13 16:26	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA3615-5F	**Date Sampled:**	04/10/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	482	15	0.70	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP25000

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-6	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z15618.D	1	04/24/13	KW	n/a	n/a	VZ653
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-6	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene [a]	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.2	5.0	2.0	ug/l	J
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.88	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-6	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	93%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z15615.D	1	04/24/13	KW	n/a	n/a	VZ653
Run #2	Z15622.D	10	04/24/13	KW	n/a	n/a	VZ653

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	19.1	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	0.26	1.0	0.20	ug/l	J
135-98-8	sec-Butylbenzene	4.9	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	5.3	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	0.83	2.0	0.49	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.75	1.0	0.25	ug/l	J
95-50-1	o-Dichlorobenzene [a]	2.8	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	0.92	1.0	0.20	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	242 [b]	10	2.9	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	542 [b]	10	2.0	ug/l	
99-87-6	p-Isopropyltoluene	0.52	1.0	0.20	ug/l	J
108-10-1	4-Methyl-2-pentanone	3.9	5.0	2.3	ug/l	J
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	2.5	5.0	1.0	ug/l	J
103-65-1	n-Propylbenzene	30.2	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	72.7 [b]	20	2.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	6.1	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	13.4	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	165 [b]	20	3.0	ug/l	
95-47-6	o-Xylene	91.9	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%	91%	83-118%
17060-07-0	1,2-Dichloroethane-D4	94%	98%	79-125%
2037-26-5	Toluene-D8	85%	98%	85-112%
460-00-4	4-Bromofluorobenzene	89%	94%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L062676.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	10.8	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	1.8	4.8	0.65	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	1.8	4.8	0.61	ug/l	J
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		14-67%
4165-62-2	Phenol-d5	29%		10-50%
118-79-6	2,4,6-Tribromophenol	93%		33-118%
4165-60-0	Nitrobenzene-d5	66%		42-108%
321-60-8	2-Fluorobiphenyl	77%		40-106%
1718-51-0	Terphenyl-d14	83%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD121535.D	10	04/15/13	CP	n/a	n/a	GCD4962
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	3.29	1.0	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	112%		70-131%
98-08-8	aaa-Trifluorotoluene	96%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL47670.D	5	04/19/13	SJL	04/15/13	OP46449	GLL1800
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.16	1.2	0.48	mg/l	
	TPH (> C22-C36)	ND	1.2	0.48	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	743	300	29	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	263	15	0.70	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP25000

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7	**Date Sampled:**	04/10/13
Matrix:	AQ - Ground Water	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	5.2	4.0	2.0	mg/l	2	04/12/13 08:30	MG	SM19 5210B
Chemical Oxygen Demand	36.8	20	5.3	mg/l	1	04/17/13 09:10	LE	SM19 5220C
Hydrogen Sulfide	0.79 J	1.0	0.50	mg/l	1	04/15/13 14:02	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.74	0.40	0.059	mg/l	1	04/22/13 17:08	LM	SM18 3500FED M
Iron, Ferrous [b]	0.030 U	0.10	0.030	mg/l	1	04/12/13 15:05	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	04/23/13 13:56	VK	EPA 350.1
Nitrogen, Nitrate [c]	1.3 U	2.5	1.3	mg/l	25	04/12/13 15:34	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	2.9	0.53	0.17	mg/l	1	04/23/13 11:20	MG	EPA 351.2
Solids, Total Dissolved [d]	5370	500	50	mg/l	5	04/18/13 14:20	KC	SM19 2540C
Sulfate	3440	100	30	mg/l	50	04/15/13 17:14	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.
(d) Sample analyzed beyond hold time due to laboratory error.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA3615-7F	**Date Sampled:**	04/10/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	04/12/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	231	15	0.70	ug/l	1	04/22/13	04/22/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10689
(2) Prep QC Batch: MP25000

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-8	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z15619.D	1	04/24/13	KW	n/a	n/a	VZ653
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-8	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene [a]	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.3	5.0	2.0	ug/l	J
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene [a]	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.31	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA3615-8	**Date Sampled:**	04/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/12/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	92%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA3615

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 04112013-01
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
SS61-MW21	SS61-MW21	4/10/2013	1320	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X			1	1
TRIP BLANK				-	TB	1	WQ	2	X												2	1
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. JH Moore	4/11/13	1400	1. PO		
2. PO	04/12/13	1000	2. RW		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest Labs
Lab Recipient:
Shipped No.:
Airbill Number: 7994 9894 7512
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA3615: Chain of Custody
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bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
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Tel: 205-918-4000
Fax: 205-918-4050

FA3615

Page: 1 of 1
Project No: 9100133
COC Number(1): 04112013-02
LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

Field Sample ID (30 Characters Max)	ERPIMS LOCID (13 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
SS61-MW26	SS61-MW26	4/10/2013	1510	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X			3	2
Trip Blank				-	TB	1	WQ	2	X												4	2
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	4/11/13	1400	1. FE		
2. [signature]	04-12-13	1000	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest Labs
Lab Recipient:
Shipped No.:
Airbill Number: 7994989947590
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA3615: Chain of Custody
Page 2 of 5

bhate ENVIRONMENT INFRASTRUCTURE

FA3615

Page: 1 of 1

Project No: 9100133

COC Number(1): 04112013-03

LIMS Number:

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base

Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)

Client Name: USACE - Omaha District

Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
SS61-MW23	SS61-MW23	4/10/2013	1525	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X			5	3
Trip Blank				-	TB	1	WQ	2	X												6	3
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Sample Analysis Requested (5)

Quality Assurance Samples (6)

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	4/11/13	1400	1. [signature]		
2. FE 472 78			2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:

Method of Shipment: Fed Ex Airbill Number: 7994 9894 7523

Analytical Lab: Accutest Labs Delivery Location: Orlando, FL

Lab Recipient: Delivery Date/Time:

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

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

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

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
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Tel: 205-918-4000
Fax: 205-918-4050

FA3615

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 04112013-04
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q4)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Tony Lucero/ Randy Pochel

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
1 SS61-MW24	SS61-MW24	4/10/13	1710	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X			7	4
2 Trip Blank				-	TB	1	WQ	2	X												8	4
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	4/11/13	1400	1. [signature]		
2. [signature]	04/12/13	(cont)	2. [signature] ALSA	4/12/13	0000
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest Labs
Lab Recipient:
Shipped No.:
Airbill Number: 7994 9894 7567
Delivery Location: Orlando, FL
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, WQ = 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. 2.0, 1.8, 2.2, 2.2
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

5.1 5

FA3615: Chain of Custody
Page 4 of 5

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA3615 CLIENT: Bhate PROJECT: SS-61 VCM (GW-04)

DATE/TIME RECEIVED: 04-12-13 1000 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 4

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7994 9894 7512

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [✓] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [✓] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [✓] RECEIVED WATER TRIP BLANK 4
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM____ 5-GRAM____

NUMBER OF 5035 FIELD KITS ? ____

NUMBER OF LAB FILTERED METALS ? 4

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 1.6 1.4 1.8 1.8
- [ ] CORRECTED TEMPS: 2.0 1.8, 2.2, 2.2

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE RW 04-12-13 REVIEWER SIGNATURE/DATE 04/12/13

NF 12/10

receipt confirmation 122910.xls

5.1 5

FA3615: Chain of Custody

Page 5 of 5

Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ653-MB	Z15604.D	1	04/24/13	KW	n/a	n/a	VZ653

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3615-1, FA3615-2, FA3615-3, FA3615-4, FA3615-5, FA3615-6, FA3615-7, FA3615-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ653-MB	Z15604.D	1	04/24/13	KW	n/a	n/a	VZ653

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3615-1, FA3615-2, FA3615-3, FA3615-4, FA3615-5, FA3615-6, FA3615-7, FA3615-8

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	0.91	2.0	0.50	ug/l	J
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	1.1	5.0	1.0	ug/l	J
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.57	1.0	0.50	ug/l	J
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ653-MB	Z15604.D	1	04/24/13	KW	n/a	n/a	VZ653

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3615-1, FA3615-2, FA3615-3, FA3615-4, FA3615-5, FA3615-6, FA3615-7, FA3615-8

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	89%	83-118%
17060-07-0	1,2-Dichloroethane-D4	96%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	94%	83-118%

Blank Spike Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ653-BS	Z15603.D	1	04/24/13	KW	n/a	n/a	VZ653

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3615-1, FA3615-2, FA3615-3, FA3615-4, FA3615-5, FA3615-6, FA3615-7, FA3615-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	151	121	50-147
107-02-8	Acrolein	125	97.6	78	31-154
107-13-1	Acrylonitrile	125	104	83	58-126
71-43-2	Benzene	25	27.9	112	81-122
108-86-1	Bromobenzene	25	27.9	112	80-121
74-97-5	Bromochloromethane	25	25.8	103	76-123
75-27-4	Bromodichloromethane	25	26.2	105	79-123
75-25-2	Bromoform	25	21.6	86	66-123
104-51-8	n-Butylbenzene	25	28.0	112	79-126
135-98-8	sec-Butylbenzene	25	29.8	119	83-133
98-06-6	tert-Butylbenzene	25	29.9	120	80-133
108-90-7	Chlorobenzene	25	29.4	118	82-124
75-00-3	Chloroethane	25	26.3	105	62-144
67-66-3	Chloroform	25	27.4	110	80-124
95-49-8	o-Chlorotoluene	25	29.2	117	81-127
106-43-4	p-Chlorotoluene	25	29.9	120	83-130
110-75-8	2-Chloroethyl vinyl ether	125	101	81	56-122
75-15-0	Carbon disulfide	25	33.7	135	66-148
56-23-5	Carbon tetrachloride	25	24.8	99	76-136
75-34-3	1,1-Dichloroethane	25	27.0	108	81-122
75-35-4	1,1-Dichloroethylene	25	29.9	120	78-137
563-58-6	1,1-Dichloropropene	25	25.0	100	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	23.8	95	64-123
106-93-4	1,2-Dibromoethane	25	24.2	97	75-120
107-06-2	1,2-Dichloroethane	25	24.8	99	75-125
78-87-5	1,2-Dichloropropane	25	25.6	102	76-124
142-28-9	1,3-Dichloropropane	25	26.8	107	80-118
594-20-7	2,2-Dichloropropane	25	27.0	108	74-139
124-48-1	Dibromochloromethane	25	24.9	100	78-122
75-71-8	Dichlorodifluoromethane	25	34.9	140	42-167
156-59-2	cis-1,2-Dichloroethylene	25	27.0	108	78-120
10061-01-5	cis-1,3-Dichloropropene	25	22.8	91	75-118
541-73-1	m-Dichlorobenzene	25	29.4	118	84-125
95-50-1	o-Dichlorobenzene	25	31.4	126*	82-124
106-46-7	p-Dichlorobenzene	25	28.7	115	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.0	112	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ653-BS	Z15603.D	1	04/24/13	KW	n/a	n/a	VZ653

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3615-1, FA3615-2, FA3615-3, FA3615-4, FA3615-5, FA3615-6, FA3615-7, FA3615-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	25.0	100	80-120
100-41-4	Ethylbenzene	25	29.0	116	81-121
591-78-6	2-Hexanone	125	140	112	61-129
87-68-3	Hexachlorobutadiene	25	33.7	135	75-142
110-54-3	Hexane	25	29.3	117	69-132
98-82-8	Isopropylbenzene	25	28.5	114	83-132
99-87-6	p-Isopropyltoluene	25	28.7	115	79-130
108-10-1	4-Methyl-2-pentanone	125	130	104	66-122
74-83-9	Methyl bromide	25	25.0	100	59-143
74-87-3	Methyl chloride	25	28.3	113	50-159
74-95-3	Methylene bromide	25	24.1	96	78-119
75-09-2	Methylene chloride	25	26.8	107	69-135
78-93-3	Methyl ethyl ketone	125	100	80	56-143
1634-04-4	Methyl Tert Butyl Ether	25	24.6	98	72-117
91-20-3	Naphthalene	25	32.2	129	63-132
103-65-1	n-Propylbenzene	25	29.9	120	82-133
100-42-5	Styrene	25	26.2	105	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	26.0	104	77-122
71-55-6	1,1,1-Trichloroethane	25	28.1	112	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	24.6	98	72-120
79-00-5	1,1,2-Trichloroethane	25	27.1	108	76-119
87-61-6	1,2,3-Trichlorobenzene	25	37.0	148*	68-131
96-18-4	1,2,3-Trichloropropane	25	25.7	103	77-120
120-82-1	1,2,4-Trichlorobenzene	25	32.4	130*	73-129
95-63-6	1,2,4-Trimethylbenzene	25	26.5	106	79-120
108-67-8	1,3,5-Trimethylbenzene	25	26.8	107	79-120
127-18-4	Tetrachloroethylene	25	28.3	113	76-135
108-88-3	Toluene	25	28.8	115	80-120
79-01-6	Trichloroethylene	25	27.6	110	81-126
75-69-4	Trichlorofluoromethane	25	28.2	113	71-156
75-01-4	Vinyl chloride	25	29.6	118	69-159
108-05-4	Vinyl Acetate	125	113	90	43-154
	m,p-Xylene	50	55.6	111	79-126
95-47-6	o-Xylene	25	30.4	122	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ653-BS	Z15603.D	1	04/24/13	KW	n/a	n/a	VZ653

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3615-1, FA3615-2, FA3615-3, FA3615-4, FA3615-5, FA3615-6, FA3615-7, FA3615-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	83-118%
17060-07-0	1,2-Dichloroethane-D4	91%	79-125%
2037-26-5	Toluene-D8	94%	85-112%
460-00-4	4-Bromofluorobenzene	87%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3691-3MS	Z15609.D	1	04/24/13	KW	n/a	n/a	VZ653
FA3691-3MSD	Z15610.D	1	04/24/13	KW	n/a	n/a	VZ653
FA3691-3	Z15608.D	1	04/24/13	KW	n/a	n/a	VZ653

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3615-1, FA3615-2, FA3615-3, FA3615-4, FA3615-5, FA3615-6, FA3615-7, FA3615-8

CAS No.	Compound	FA3691-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	96.8	77	97.6	78	1	50-147/21
107-02-8	Acrolein	ND		125	102	82	91.3	73	11	31-154/29
107-13-1	Acrylonitrile	ND		125	108	86	107	86	1	58-126/16
71-43-2	Benzene	ND		25	26.3	105	25.2	101	4	81-122/14
108-86-1	Bromobenzene	ND		25	25.4	102	24.8	99	2	80-121/14
74-97-5	Bromochloromethane	ND		25	23.7	95	24.2	97	2	76-123/14
75-27-4	Bromodichloromethane	ND		25	23.8	95	21.7	87	9	79-123/19
75-25-2	Bromoform	ND		25	17.9	72	17.0	68	5	66-123/21
104-51-8	n-Butylbenzene	ND		25	24.8	99	24.9	100	0	79-126/16
135-98-8	sec-Butylbenzene	ND		25	26.6	106	26.2	105	2	83-133/16
98-06-6	tert-Butylbenzene	ND		25	27.0	108	26.4	106	2	80-133/16
108-90-7	Chlorobenzene	ND		25	27.1	108	26.3	105	3	82-124/14
75-00-3	Chloroethane	ND		25	27.1	108	24.1	96	12	62-144/20
67-66-3	Chloroform	ND		25	24.9	100	24.0	96	4	80-124/15
95-49-8	o-Chlorotoluene	ND		25	26.8	107	25.8	103	4	81-127/15
106-43-4	p-Chlorotoluene	ND		25	27.0	108	26.6	106	1	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		125	ND	0*	ND	0*	nc	56-122/23
75-15-0	Carbon disulfide	ND		25	23.6	94	21.7	87	8	66-148/23
56-23-5	Carbon tetrachloride	ND		25	22.3	89	20.0	80	11	76-136/23
75-34-3	1,1-Dichloroethane	ND		25	25.0	100	24.2	97	3	81-122/15
75-35-4	1,1-Dichloroethylene	ND		25	27.1	108	27.2	109	0	78-137/18
563-58-6	1,1-Dichloropropene	ND		25	23.3	93	22.3	89	4	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	22.8	91	21.6	86	5	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	22.7	91	23.4	94	3	75-120/13
107-06-2	1,2-Dichloroethane	ND		25	24.1	96	23.1	92	4	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	24.1	96	23.2	93	4	76-124/14
142-28-9	1,3-Dichloropropane	ND		25	25.3	101	25.1	100	1	80-118/13
594-20-7	2,2-Dichloropropane	ND		25	24.3	97	23.1	92	5	74-139/17
124-48-1	Dibromochloromethane	ND		25	21.8	87	20.1	80	8	78-122/19
75-71-8	Dichlorodifluoromethane	ND		25	34.2	137	34.4	138	1	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND		25	25.1	100	24.5	98	2	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	17.2	69*	16.1	64*	7	75-118/23
541-73-1	m-Dichlorobenzene	ND		25	26.2	105	26.2	105	0	84-125/14
95-50-1	o-Dichlorobenzene	ND		25	28.6	114	29.1	116	2	82-124/14
106-46-7	p-Dichlorobenzene	ND		25	26.1	104	25.6	102	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	25.7	103	24.1	96	6	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3691-3MS	Z15609.D	1	04/24/13	KW	n/a	n/a	VZ653
FA3691-3MSD	Z15610.D	1	04/24/13	KW	n/a	n/a	VZ653
FA3691-3	Z15608.D	1	04/24/13	KW	n/a	n/a	VZ653

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3615-1, FA3615-2, FA3615-3, FA3615-4, FA3615-5, FA3615-6, FA3615-7, FA3615-8

CAS No.	Compound	FA3691-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		25	20.2	81	18.7	75*	8	80-120/22
100-41-4	Ethylbenzene	ND		25	26.9	108	26.5	106	1	81-121/14
591-78-6	2-Hexanone	ND		125	124	99	131	105	5	61-129/18
87-68-3	Hexachlorobutadiene	ND		25	27.5	110	29.2	117	6	75-142/19
110-54-3	Hexane	ND		25	26.4	106	25.2	101	5	69-132/20
98-82-8	Isopropylbenzene	ND		25	26.5	106	25.9	104	2	83-132/15
99-87-6	p-Isopropyltoluene	ND		25	25.3	101	25.2	101	0	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		125	130	104	134	107	3	66-122/16
74-83-9	Methyl bromide	ND		25	26.0	104	23.8	95	9	59-143/19
74-87-3	Methyl chloride	ND		25	28.7	115	27.6	110	4	50-159/19
74-95-3	Methylene bromide	ND		25	23.0	92	22.5	90	2	78-119/14
75-09-2	Methylene chloride	ND		25	24.4	98	23.6	94	3	69-135/16
78-93-3	Methyl ethyl ketone	ND		125	86.4	69	90.3	72	4	56-143/18
1634-04-4	Methyl Tert Butyl Ether	ND		25	22.9	92	22.7	91	1	72-117/14
91-20-3	Naphthalene	ND		25	27.7	111	33.2	133*	18	63-132/25
103-65-1	n-Propylbenzene	ND		25	27.2	109	26.1	104	4	82-133/15
100-42-5	Styrene	ND		25	23.8	95	22.2	89	7	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		25	24.0	96	22.2	89	8	77-122/19
71-55-6	1,1,1-Trichloroethane	ND		25	25.6	102	24.7	99	4	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	23.1	92	24.0	96	4	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		25	25.2	101	25.9	104	3	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	29.6	118	36.2	145*	20	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		25	23.0	92	23.9	96	4	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		25	26.4	106	30.6	122	15	73-129/20
95-63-6	1,2,4-Trimethylbenzene	0.36	J	25	24.4	96	23.6	93	3	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		25	24.2	97	23.6	94	3	79-120/19
127-18-4	Tetrachloroethylene	ND		25	26.0	104	25.2	101	3	76-135/16
108-88-3	Toluene	0.25	J	25	27.3	108	26.2	104	4	80-120/14
79-01-6	Trichloroethylene	ND		25	26.6	106	26.4	106	1	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	29.2	117	28.4	114	3	71-156/21
75-01-4	Vinyl chloride	ND		25	30.9	124	29.4	118	5	69-159/18
108-05-4	Vinyl Acetate	ND		125	119	95	119	95	0	43-154/14
	m,p-Xylene	0.47	J	50	52.5	104	50.8	101	3	79-126/15
95-47-6	o-Xylene	ND		25	28.9	116	28.1	112	3	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3691-3MS	Z15609.D	1	04/24/13	KW	n/a	n/a	VZ653
FA3691-3MSD	Z15610.D	1	04/24/13	KW	n/a	n/a	VZ653
FA3691-3	Z15608.D	1	04/24/13	KW	n/a	n/a	VZ653

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA3615-1, FA3615-2, FA3615-3, FA3615-4, FA3615-5, FA3615-6, FA3615-7, FA3615-8

CAS No.	Surrogate Recoveries	MS	MSD	FA3691-3	Limits
1868-53-7	Dibromofluoromethane	91%	92%	89%	83-118%
17060-07-0	1,2-Dichloroethane-D4	92%	92%	97%	79-125%
2037-26-5	Toluene-D8	93%	94%	100%	85-112%
460-00-4	4-Bromofluorobenzene	84%	86%	89%	83-118%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46438-MB	L062669.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46438-MB	L062669.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46438-MB	L062669.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	47%	14-67%
4165-62-2	Phenol-d5	36%	10-50%
118-79-6	2,4,6-Tribromophenol	80%	33-118%
4165-60-0	Nitrobenzene-d5	67%	42-108%
321-60-8	2-Fluorobiphenyl	69%	40-106%
1718-51-0	Terphenyl-d14	87%	39-121%

Blank Spike Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46438-BS	L062668.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	35.7	36	10-69
95-57-8	2-Chlorophenol	50	36.1	72	52-98
59-50-7	4-Chloro-3-methyl phenol	50	39.6	79	54-103
120-83-2	2,4-Dichlorophenol	50	38.7	77	53-103
105-67-9	2,4-Dimethylphenol	50	34.4	69	43-90
51-28-5	2,4-Dinitrophenol	100	76.7	77	44-112
534-52-1	4,6-Dinitro-o-cresol	100	96.5	97	66-121
95-48-7	2-Methylphenol	50	36.0	72	43-90
	3&4-Methylphenol	100	66.9	67	36-88
88-75-5	2-Nitrophenol	50	37.0	74	53-102
100-02-7	4-Nitrophenol	100	45.2	45	18-62
87-86-5	Pentachlorophenol	100	85.2	85	61-115
108-95-2	Phenol	50	22.4	45	19-56
95-95-4	2,4,5-Trichlorophenol	50	41.3	83	62-109
88-06-2	2,4,6-Trichlorophenol	50	39.6	79	59-107
83-32-9	Acenaphthene	70	51.3	73	61-107
208-96-8	Acenaphthylene	50	41.3	83	60-104
62-53-3	Aniline	50	35.3	71	47-100
120-12-7	Anthracene	70	50.3	72	65-108
92-87-5	Benzidine	50	25.2	50	25-99
56-55-3	Benzo(a)anthracene	70	54.6	78	66-111
50-32-8	Benzo(a)pyrene	70	51.2	73	62-107
205-99-2	Benzo(b)fluoranthene	70	50.3	72	65-114
191-24-2	Benzo(g,h,i)perylene	70	48.7	70	66-116
207-08-9	Benzo(k)fluoranthene	70	50.3	72	65-114
101-55-3	4-Bromophenyl phenyl ether	50	41.6	83	65-109
85-68-7	Butyl benzyl phthalate	50	40.2	80	65-112
100-51-6	Benzyl Alcohol	50	34.6	69	46-94
91-58-7	2-Chloronaphthalene	50	37.9	76	57-103
106-47-8	4-Chloroaniline	50	37.6	75	49-105
86-74-8	Carbazole	50	39.2	78	59-113
218-01-9	Chrysene	70	52.5	75	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	37.5	75	51-102
111-44-4	bis(2-Chloroethyl)ether	50	34.6	69	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	35.4	71	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	39.5	79	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46438-BS	L062668.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	31.8	64	48-97
122-66-7	1,2-Diphenylhydrazine	50	39.6	79	61-110
541-73-1	1,3-Dichlorobenzene	50	29.9	60	45-95
106-46-7	1,4-Dichlorobenzene	50	30.8	62	45-98
121-14-2	2,4-Dinitrotoluene	50	39.3	79	61-110
606-20-2	2,6-Dinitrotoluene	50	40.9	82	63-108
91-94-1	3,3'-Dichlorobenzidine	50	39.4	79	46-117
53-70-3	Dibenzo(a,h)anthracene	70	52.2	75	66-119
132-64-9	Dibenzofuran	50	39.8	80	61-106
84-74-2	Di-n-butyl phthalate	50	39.2	78	65-107
117-84-0	Di-n-octyl phthalate	50	39.3	79	62-118
84-66-2	Diethyl phthalate	50	40.9	82	64-108
131-11-3	Dimethyl phthalate	50	40.1	80	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	41.8	84	61-117
206-44-0	Fluoranthene	50	43.6	87	63-106
86-73-7	Fluorene	70	55.9	80	62-108
118-74-1	Hexachlorobenzene	50	41.2	82	63-108
87-68-3	Hexachlorobutadiene	50	32.2	64	42-102
77-47-4	Hexachlorocyclopentadiene	50	31.2	62	39-102
67-72-1	Hexachloroethane	50	28.1	56	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	70	53.1	76	64-119
78-59-1	Isophorone	50	32.4	65	43-87
90-12-0	1-Methylnaphthalene	50	37.9	76	53-102
91-57-6	2-Methylnaphthalene	50	37.3	75	51-102
88-74-4	2-Nitroaniline	50	47.8	96	54-128
99-09-2	3-Nitroaniline	50	38.0	76	56-106
100-01-6	4-Nitroaniline	50	38.0	76	55-120
91-20-3	Naphthalene	50	36.4	73	47-100
98-95-3	Nitrobenzene	50	35.9	72	50-104
62-75-9	N-Nitrosodimethylamine	50	22.8	46	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	39.5	79	52-104
86-30-6	N-Nitrosodiphenylamine	50	41.1	82	64-108
85-01-8	Phenanthrene	70	55.6	79	66-110
129-00-0	Pyrene	70	57.8	83	64-113
110-86-1	Pyridine	50	20.1	40	23-74
120-82-1	1,2,4-Trichlorobenzene	50	34.0	68	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46438-BS	L062668.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	50%	14-67%
4165-62-2	Phenol-d5	39%	10-50%
118-79-6	2,4,6-Tribromophenol	82%	33-118%
4165-60-0	Nitrobenzene-d5	67%	42-108%
321-60-8	2-Fluorobiphenyl	75%	40-106%
1718-51-0	Terphenyl-d14	91%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46438-MS	L062672.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183
OP46438-MSD	L062673.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183
FA3615-1	L062671.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	FA3615-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		200	115	58	94.1	47	20	10-69/39
95-57-8	2-Chlorophenol	ND		100	72.2	72	68.1	68	6	52-98/25
59-50-7	4-Chloro-3-methyl phenol	ND		100	82.1	82	76.7	77	7	54-103/23
120-83-2	2,4-Dichlorophenol	ND		100	76.3	76	72.2	72	6	53-103/26
105-67-9	2,4-Dimethylphenol	ND		100	71.3	71	69.2	69	3	43-90/27
51-28-5	2,4-Dinitrophenol	ND		200	172	86	157	79	9	44-112/25
534-52-1	4,6-Dinitro-o-cresol	ND		200	214	107	192	96	11	66-121/23
95-48-7	2-Methylphenol	ND		100	72.3	72	68.6	69	5	43-90/28
	3&4-Methylphenol	ND		200	144	72	135	68	6	36-88/28
88-75-5	2-Nitrophenol	ND		100	73.6	74	68.9	69	7	53-102/29
100-02-7	4-Nitrophenol	ND		200	132	66*	109	55	19	18-62/33
87-86-5	Pentachlorophenol	ND		200	184	92	169	85	8	61-115/26
108-95-2	Phenol	2.1	J	100	58.4	56	52.0	50	12	19-56/35
95-95-4	2,4,5-Trichlorophenol	ND		100	85.5	86	81.5	82	5	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		100	81.0	81	76.5	77	6	59-107/23
83-32-9	Acenaphthene	ND		140	107	76	100	71	7	61-107/22
208-96-8	Acenaphthylene	ND		100	84.8	85	77.6	78	9	60-104/22
62-53-3	Aniline	ND		100	72.2	72	66.6	67	8	47-100/30
120-12-7	Anthracene	ND		140	106	76	99.7	71	6	65-108/20
92-87-5	Benzidine	ND		100	31.3	31	27.7	28	12	25-99/31
56-55-3	Benzo(a)anthracene	ND		140	117	84	106	76	10	66-111/22
50-32-8	Benzo(a)pyrene	ND		140	108	77	102	73	6	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		140	115	82	105	75	9	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		140	110	79	101	72	9	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		140	106	76	94.7	68	11	65-114/24
101-55-3	4-Bromophenyl phenyl ether	ND		100	84.7	85	78.1	78	8	65-109/23
85-68-7	Butyl benzyl phthalate	ND		100	90.8	91	85.2	85	6	65-112/24
100-51-6	Benzyl Alcohol	ND		100	73.1	73	68.8	69	6	46-94/27
91-58-7	2-Chloronaphthalene	ND		100	78.1	78	72.5	73	7	57-103/23
106-47-8	4-Chloroaniline	ND		100	68.1	68	63.5	64	7	49-105/27
86-74-8	Carbazole	ND		100	82.5	83	77.3	77	7	59-113/21
218-01-9	Chrysene	ND		140	110	79	105	75	5	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	ND		100	74.7	75	69.8	70	7	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		100	71.4	71	66.3	66	7	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	70.8	71	67.5	68	5	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	82.6	83	77.2	77	7	62-105/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46438-MS	L062672.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183
OP46438-MSD	L062673.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183
FA3615-1	L062671.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	FA3615-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	5.7		100	75.5	70	72.3	67	4	48-97/24
122-66-7	1,2-Diphenylhydrazine	ND		100	84.3	84	77.4	77	9	61-110/24
541-73-1	1,3-Dichlorobenzene	1.7	J	100	71.6	70	66.1	64	8	45-95/25
106-46-7	1,4-Dichlorobenzene	2.2	J	100	70.7	69	67.7	66	4	45-98/25
121-14-2	2,4-Dinitrotoluene	ND		100	82.5	83	76.4	76	8	61-110/21
606-20-2	2,6-Dinitrotoluene	ND		100	84.1	84	79.3	79	6	63-108/21
91-94-1	3,3'-Dichlorobenzidine	ND		100	83.5	84	74.7	75	11	46-117/29
53-70-3	Dibenzo(a,h)anthracene	ND		140	114	81	102	73	11	66-119/24
132-64-9	Dibenzofuran	ND		100	84.1	84	77.6	78	8	61-106/21
84-74-2	Di-n-butyl phthalate	ND		100	81.9	82	76.8	77	6	65-107/21
117-84-0	Di-n-octyl phthalate	ND		100	85.1	85	79.3	79	7	62-118/24
84-66-2	Diethyl phthalate	ND		100	83.8	84	78.6	79	6	64-108/21
131-11-3	Dimethyl phthalate	ND		100	82.5	83	79.3	79	4	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	91.2	91	85.8	86	6	61-117/23
206-44-0	Fluoranthene	ND		100	88.3	88	84.2	84	5	63-106/21
86-73-7	Fluorene	ND		140	119	85	110	79	8	62-108/20
118-74-1	Hexachlorobenzene	ND		100	83.8	84	78.0	78	7	63-108/22
87-68-3	Hexachlorobutadiene	ND		100	72.3	72	66.4	66	9	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND		100	62.4	62	59.6	60	5	39-102/29
67-72-1	Hexachloroethane	ND		100	69.2	69	64.0	64	8	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		140	116	83	108	77	7	64-119/24
78-59-1	Isophorone	ND		100	64.2	64	60.7	61	6	43-87/25
90-12-0	1-Methylnaphthalene	ND		100	78.2	78	72.7	73	7	53-102/27
91-57-6	2-Methylnaphthalene	ND		100	76.2	76	69.7	70	9	51-102/26
88-74-4	2-Nitroaniline	ND		100	101	101	94.7	95	6	54-128/24
99-09-2	3-Nitroaniline	ND		100	73.2	73	63.8	64	14	56-106/27
100-01-6	4-Nitroaniline	ND		100	79.4	79	73.6	74	8	55-120/24
91-20-3	Naphthalene	ND		100	74.6	75	70.7	71	5	47-100/29
98-95-3	Nitrobenzene	ND		100	73.4	73	68.2	68	7	50-104/28
62-75-9	N-Nitrosodimethylamine	ND		100	58.0	58	49.6	50	16	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	ND		100	74.8	75	73.5	74	2	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND		100	86.3	86	80.7	81	7	64-108/23
85-01-8	Phenanthrene	ND		140	117	84	108	77	8	66-110/21
129-00-0	Pyrene	ND		140	126	90	120	86	5	64-113/23
110-86-1	Pyridine	ND		100	51.6	52	42.6	43	19	23-74/34
120-82-1	1,2,4-Trichlorobenzene	ND		100	71.0	71	66.6	67	6	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46438-MS	L062672.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183
OP46438-MSD	L062673.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183
FA3615-1	L062671.D	1	04/16/13	NAF	04/15/13	OP46438	SL3183

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Surrogate Recoveries	MS	MSD	FA3615-1	Limits
367-12-4	2-Fluorophenol	60%	53%	36%	14-67%
4165-62-2	Phenol-d5	51%*	44%	27%	10-50%
118-79-6	2,4,6-Tribromophenol	84%	80%	79%	33-118%
4165-60-0	Nitrobenzene-d5	69%	64%	63%	42-108%
321-60-8	2-Fluorobiphenyl	74%	70%	67%	40-106%
1718-51-0	Terphenyl-d14	98%	93%	79%	39-121%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD4962-MB	CD121523.D	1	04/15/13	CP	n/a	n/a	GCD4962

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	91%	70-131%
98-08-8	aaa-Trifluorotoluene	83%	69-143%

Blank Spike Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD4962-BS	CD121522.D	1	04/15/13	CP	n/a	n/a	GCD4962

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.388	97	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	101%	70-131%
98-08-8	aaa-Trifluorotoluene	110%	69-143%

8.2.1

8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA3608-2MS	CD121530.D	1	04/15/13	CP	n/a	n/a	GCD4962
FA3608-2MSD	CD121531.D	1	04/15/13	CP	n/a	n/a	GCD4962
FA3608-2	CD121524.D	1	04/15/13	CP	n/a	n/a	GCD4962

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	FA3608-2 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		0.4	0.373	93	0.359	90	4	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA3608-2	Limits
460-00-4	4-Bromofluorobenzene	97%	93%	91%	70-131%
98-08-8	aaa-Trifluorotoluene	102%	100%	85%	69-143%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46449-MB	LL47641.D	1	04/18/13	SJL	04/15/13	OP46449	GLL1799

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	73%	50-131%

9.1.1

9

Blank Spike Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46449-BS	LL47640.D	1	04/18/13	SJL	04/15/13	OP46449	GLL1799

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.872	87	56-123
	TPH (> C22-C36)	1	1.25	125	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	94%	50-131%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA3615
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46449-MS	LL47659.D	1	04/19/13	SJL	04/15/13	OP46449	GLL1799
OP46449-MSD	LL47660.D	1	04/19/13	SJL	04/15/13	OP46449	GLL1799
FA3615-5	LL47658.D	1	04/19/13	SJL	04/15/13	OP46449	GLL1799

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA3615-1, FA3615-3, FA3615-5, FA3615-7

CAS No.	Compound	FA3615-5 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	ND		2.13	1.88	88	1.93	91	3	56-123/33
	TPH (> C22-C36)	ND		2.13	2.31	109	2.35	110	2	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA3615-5	Limits
84-15-1	o-Terphenyl	84%	84%	82%	50-131%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA3615
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25000
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:					04/22/13		04/22/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	15	15				
Antimony	6.0	1.3	1.3				
Arsenic	10	1.6	2.5				
Barium	200	1	1				
Beryllium	4.0	.5	.5				
Cadmium	5.0	.5	.5				
Calcium	1000	50	50				
Chromium	10	1.8	2				
Cobalt	50	.5	.5				
Copper	25	1	1				
Iron	300	29	29	-6.2	<300		
Lead	5.0	1.1	1.1				
Magnesium	5000	74	74				
Manganese	15	.7	.7	-0.10	<15	0.0	<15
Molybdenum	50	.6	1				
Nickel	40	.5	.5				
Potassium	10000	200	200				
Selenium	10	2	2				
Silver	10	.5	.5				
Sodium	10000	500	500				
Strontium	10	.5	.5				
Thallium	10	1.3	1.3				
Tin	50	.7	1.8				
Titanium	10	.9	1				
Vanadium	50	.5	1				
Zinc	20	3	5				

Associated samples MP25000: FA3615-1, FA3615-3, FA3615-5, FA3615-7, FA3615-1F, FA3615-3F, FA3615-5F, FA3615-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA3615
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25000
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			04/22/13					04/22/13	
Metal	FA3615-1 Original	DUP	RPD	QC Limits	FA3615-1 Original	MS	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper	anr								
Iron	2670	2770	3.7	0-20	2670	27300	26000	94.7	70-130
Lead	anr								
Magnesium									
Manganese	1590	1480	7.2	0-20	1590	1930	500	68.0N(a)	70-130
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP25000: FA3615-1, FA3615-3, FA3615-5, FA3615-7, FA3615-1F, FA3615-3F, FA3615-5F, FA3615-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA3615
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25000
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/22/13

Metal	FA3615-1 Original	MSD	Spikelot MPFLICP1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper	anr					
Iron	2670	27900	26000	97.0	2.2	20
Lead	anr					
Magnesium						
Manganese	1590	1970	500	76.0	2.1	20
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP25000: FA3615-1, FA3615-3, FA3615-5, FA3615-7, FA3615-1F, FA3615-3F, FA3615-5F, FA3615-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA3615
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25000
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/22/13

Metal	BSP Result	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	anr			
Iron	27600	26000	106.2	85-115
Lead	anr			
Magnesium				
Manganese	548	500	109.6	85-115
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP25000: FA3615-1, FA3615-3, FA3615-5, FA3615-7, FA3615-1F, FA3615-3F, FA3615-5F, FA3615-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA3615
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25000
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/22/13

Metal	FA3615-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	anr			
Iron	2670	2790	4.6	0-10
Lead	anr			
Magnesium				
Manganese	1590	1670	4.9	0-10
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP25000: FA3615-1, FA3615-3, FA3615-5, FA3615-7, FA3615-1F, FA3615-3F, FA3615-5F, FA3615-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA3615
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25000
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 04/22/13

Metal	Sample ml	Final ml	FA3615-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10	2667	2613.66	5563	0.2	150	3000	98.3	85-115
Lead										
Magnesium										
Manganese	9.8	10	1592	1560.16	1617	0.2	2.5	50	113.7	85-115
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP25000: FA3615-1, FA3615-3, FA3615-5, FA3615-7, FA3615-1F, FA3615-3F, FA3615-5F, FA3615-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA3615
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP21443/GN55303	2.0	0.0	mg/l	198	92.3	46.6*(a)	85-115%
Bromide	GP21454/GN55253	0.50	0.0	mg/l	12.5	13.3	106.4	90-110%
Bromide	GP21455/GN55253	0.50	0.0	mg/l	12.5	13.2	105.6	90-110%
Chemical Oxygen Demand	GP21475/GN55304	20	0.0	mg/l	50.0	54.0	108.0	87-122%
Chloride	GP21454/GN55253	2.0	0.0	mg/l	50	52.1	104.2	90-110%
Chloride	GP21455/GN55253	2.0	0.0	mg/l	50	52.3	104.6	90-110%
Iron, Ferrous	GN55214	0.10	0.0	mg/l	.500	0.47	94.2	82-115%
Nitrogen, Ammonia	GP21514/GN55379	0.10	0.0	mg/l	2.5	2.45	98.0	90-110%
Nitrogen, Nitrate	GP21454/GN55253	0.10	0.0	mg/l	2.5	2.67	106.8	90-110%
Nitrogen, Nitrate	GP21455/GN55253	0.10	0.0	mg/l	2.5	2.65	106.0	90-110%
Nitrogen, Nitrite	GP21454/GN55253	0.10	0.0	mg/l	2.5	2.62	104.8	90-110%
Nitrogen, Nitrite	GP21455/GN55253	0.10	0.0	mg/l	2.5	2.74	109.6	90-110%
Nitrogen, Total Kjeldahl	GP21510/GN55374	0.53	0.0	mg/l	2.63	2.47	94.1	90-110%
Solids, Total Dissolved	GN55315	100	35.0	mg/l				
Sulfate	GP21454/GN55253	2.0	0.0	mg/l	50	51.9	103.8	90-110%
Sulfate	GP21455/GN55253	2.0	0.0	mg/l	50	51.8	103.6	90-110%

Associated Samples:
Batch GN55214: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GN55315: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GP21443: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GP21454: FA3615-3, FA3615-5, FA3615-7
Batch GP21455: FA3615-1
Batch GP21475: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GP21510: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GP21514: FA3615-1, FA3615-3, FA3615-5, FA3615-7
(*) Outside of QC limits
(a) Spike recovery outside of acceptable QC criteria.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA3615
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP21443/GN55303	FA3562-11	mg/l	2.2	0.0	30.9(a)	0-30%
Iron, Ferrous	GN55214	FA3608-2	mg/l	3.9	3.8	2.2	0-31%
Solids, Total Dissolved	GN55315	FA3598-1	mg/l	714	708	0.8	0-5%

Associated Samples:
Batch GN55214: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GN55315: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GP21443: FA3615-1, FA3615-3, FA3615-5, FA3615-7
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA3615
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
BOD, 5 Day	GP21443/GN55303	FA3562-11	mg/l	2.2	198	31.6	111.4	85-115%
Bromide	GP21454/GN55308	FA3568-3	mg/l	0.24 U	12.5	11.6	92.8	90-110%
Bromide	GP21455/GN55253	FA3620-1	mg/l	0.12 U	12.5	12.3	98.4	90-110%
Chemical Oxygen Demand	GP21475/GN55304	FA3655-1	mg/l	0.0	50.0	36.8	68.7*(a)	87-122%
Chloride	GP21454/GN55308	FA3568-3	mg/l	1.6 U	50	51.4	102.8	90-110%
Chloride	GP21455/GN55253	FA3620-1	mg/l	12.9	50	65.5	105.2	90-110%
Nitrogen, Ammonia	GP21514/GN55379	FA3615-3	mg/l	0.030 U	2.5	2.4	96.0	90-110%
Nitrogen, Nitrate	GP21454/GN55308	FA3568-3	mg/l	7.0	2.5	9.2	88.0N(a)	90-110%
Nitrogen, Nitrate	GP21455/GN55253	FA3620-1	mg/l	0.050 U	2.5	2.7	108.0	90-110%
Nitrogen, Nitrite	GP21454/GN55308	FA3568-3	mg/l	0.42	2.5	2.7	91.2	90-110%
Nitrogen, Nitrite	GP21455/GN55253	FA3620-1	mg/l	0.050 U	2.5	2.7	108.0	90-110%
Nitrogen, Total Kjeldahl	GP21510/GN55374	FA3568-1	mg/l	10.4	2.63	14.8	167.6N(a)	90-110%
Sulfate	GP21454/GN55308	FA3568-3	mg/l	7.3	50	57.0	99.4	90-110%
Sulfate	GP21455/GN55253	FA3620-1	mg/l	13.7	50	64.7	102.0	90-110%

Associated Samples:
Batch GP21443: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GP21454: FA3615-3, FA3615-5, FA3615-7
Batch GP21455: FA3615-1
Batch GP21475: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GP21510: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GP21514: FA3615-1, FA3615-3, FA3615-5, FA3615-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA3615
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP21454/GN55308	FA3568-3	mg/l	0.24 U	12.5	11.6	0.0	20%
Bromide	GP21455/GN55253	FA3620-1	mg/l	0.12 U	12.5	12.3	0.0	20%
Chemical Oxygen Demand	GP21475/GN55304	FA3655-1	mg/l	0.0	50.0	39.3	6.5	26%
Chloride	GP21454/GN55308	FA3568-3	mg/l	1.6 U	50	51.5	0.2	20%
Chloride	GP21455/GN55253	FA3620-1	mg/l	12.9	50	65.4	0.2	20%
Nitrogen, Ammonia	GP21514/GN55379	FA3615-3	mg/l	0.030 U	2.5	2.4	0.0	20%
Nitrogen, Nitrate	GP21454/GN55308	FA3568-3	mg/l	7.0	2.5	9.1	1.1	20%
Nitrogen, Nitrate	GP21455/GN55253	FA3620-1	mg/l	0.050 U	2.5	2.7	0.0	20%
Nitrogen, Nitrite	GP21454/GN55308	FA3568-3	mg/l	0.42	2.5	2.8	3.6	20%
Nitrogen, Nitrite	GP21455/GN55253	FA3620-1	mg/l	0.050 U	2.5	2.6	3.8	20%
Nitrogen, Total Kjeldahl	GP21510/GN55374	FA3568-1	mg/l	10.4	2.63	13.3	10.7	20%
Sulfate	GP21454/GN55308	FA3568-3	mg/l	7.3	50	56.8	0.4	20%
Sulfate	GP21455/GN55253	FA3620-1	mg/l	13.7	50	64.7	0.0	20%

Associated Samples:
Batch GP21454: FA3615-3, FA3615-5, FA3615-7
Batch GP21455: FA3615-1
Batch GP21475: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GP21510: FA3615-1, FA3615-3, FA3615-5, FA3615-7
Batch GP21514: FA3615-1, FA3615-3, FA3615-5, FA3615-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Southeast ACCUTEST LABORATORIES

08/13/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA6464

Sampling Date: 07/16/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **65**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

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Accutest LabLink@144215 15:04 13-Aug-2013

Sample Summary

Bhate Environmental

Job No: FA6464

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA6464-1	07/16/13	10:30	DMZB	07/17/13	AQ	Ground Water	SS61-MW31
FA6464-1F	07/16/13	10:30	DMZB	07/17/13	AQ	Groundwater Filtered	SS61-MW31
FA6464-2	07/16/13	00:00	DMZB	07/17/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA6464

Site: Holloman AFB; SS61 VCM **Report Date** 7/31/2013 5:25:26 PM

1 Sample and 1 Trip Blank were collected on 07/16/2013 and were received at Accutest SE on 07/17/2013 properly preserved, at 2.6 Deg. C and intact. These Samples received an Accutest job number of FA6464. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VP669

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6352-24MS, FA6352-24MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acetone, Tetrachloroethylene are outside control limits. Blank Spike recoveries are biased high. Analytes are non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Probable cause is due to matrix interference.

VP669-BS for Tetrachloroethylene: Sporadic marginal failure.

FA6464-1 for Acetone: Associated BS recovery outside control limits.

FA6464-1 for Tetrachloroethylene: Associated BS recovery outside control limits.

FA6464-2 for Acetone: Associated BS recovery outside control limits.

FA6464-2 for Tetrachloroethylene: Associated BS recovery outside control limits.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP47835

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6461-5MS, FA6461-5MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Benzidine are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Benzidine are outside control limits for sample OP47835-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) FA6464-1 has surrogates outside control limits. Probable cause is due to matrix interference.

FA6464-1 for Nitrobenzene-d5: Outside control limits due to matrix interference.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD5020

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6507-1MS, FA6507-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP47901

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6510-3MS, FA6510-3MSD were used as the QC samples indicated.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP25542

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6464-1DUP, FA6464-1MS, FA6464-1MSD, FA6464-1PS, FA6464-1SDL were used as the QC samples for metals.

MP25542-PS1 for Manganese: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP22107

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6471-5MS, FA6471-5MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

Matrix Spike Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Recovery(s) for Sulfate are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

FA6464-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP22175

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6573-1MS, FA6573-1MSD were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP22096

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6420-10MS, FA6420-10MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Matrix Spike Recovery(s) for Nitrogen, Total Kjeldahl are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN56801

All method blanks for this batch meet method specific criteria.

Sample(s) FA6437-21DUP was used as the QC samples for Iron, Ferrous.

FA6464-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R31429

FA6464-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN56888

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6570-1DUP was used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP22091

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6468-1DUP was used as the QC samples for BOD, 5 Day.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP22148

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6464-1MS, FA6464-1MSD were used as the QC samples for Chemical Oxygen Demand.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: July 31, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA6464
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/16/13

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA6464-1	**SS61-MW31**					
sec-Butylbenzene		2.3	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		6.0	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		0.87 J	1.0	0.22	ug/l	SW846 8260B
Isopropylbenzene		54.9	1.0	0.20	ug/l	SW846 8260B
n-Propylbenzene		0.68 J	1.0	0.23	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.427	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		12.3	2.4	0.97	mg/l	SW846 8015C
Iron		367	300	29	ug/l	EPA 200.7
Manganese		553	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		5.9	4.0	2.0	mg/l	SM19 5210B
Chemical Oxygen Demand		396	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.33 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.034 J	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		3.0	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		17600	2000	200	mg/l	SM19 2540C
Sulfate		5130	1000	300	mg/l	EPA 300/SW846 9056A
FA6464-1F	**SS61-MW31**					
Manganese		533	15	0.70	ug/l	EPA 200.7
FA6464-2	**TRIP BLANK**					

No hits reported in this sample.

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P17537.D	1	07/17/13	EG	n/a	n/a	VP669
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	2.3	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	6.0	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.87	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	54.9	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.68	1.0	0.23	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene [a]	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside control limits.

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X029539.D	1	07/22/13	FS	07/18/13	OP47835	SX1409
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		14-67%
4165-62-2	Phenol-d5	41%		10-50%
118-79-6	2,4,6-Tribromophenol	99%		33-118%
4165-60-0	Nitrobenzene-d5	111% [a]		42-108%
321-60-8	2-Fluorobiphenyl	88%		40-106%
1718-51-0	Terphenyl-d14	74%		39-121%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123059.D	1	07/19/13	CP	n/a	n/a	GCD5020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.427	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		70-131%
98-08-8	aaa-Trifluorotoluene	81%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49514.D	10	07/31/13	SJL	07/23/13	OP47901	GLL1870
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	12.3	2.4	0.97	mg/l	
	TPH (> C22-C36)	ND	2.4	0.97	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	367	300	29	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	553	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	5.9	4.0	2.0	mg/l	2	07/17/13 16:20	KC	SM19 5210B
Chemical Oxygen Demand	396	20	5.3	mg/l	1	07/23/13 10:40	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	07/18/13 14:50	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.33 J	0.40	0.059	mg/l	1	07/24/13 16:51	LM	SM18 3500FED M
Iron, Ferrous [b]	0.034 J	0.10	0.030	mg/l	1	07/17/13 11:45	AC	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	07/26/13 15:27	MG	EPA 350.1
Nitrogen, Nitrate [c]	25 U	50	25	mg/l	500	07/17/13 17:59	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	3.0	0.53	0.17	mg/l	1	07/19/13 11:27	MG	EPA 351.2
Solids, Total Dissolved	17600	2000	200	mg/l	20	07/22/13 13:35	KC	SM19 2540C
Sulfate	5130	1000	300	mg/l	500	07/17/13 17:59	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA6464-1F	**Date Sampled:**	07/16/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	07/17/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	533	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6464-2	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P17524.D	1	07/17/13	EG	n/a	n/a	VP669
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6464-2	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene [a]	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6464-2	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENTAL CONSTRUCTION ENERGY
1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA6464

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07162013-02
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
1	SS61-MW31	7/16/13	1030	-	N	01	WG	18	X	X	X	X	X	X	X	X	X	X				2
2	Trip Blank			-	TB	1	WQ	2	X													2
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	7/16/13	1500	1. FX		
2. FX			2. J Cooper (ABC)		10:00
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7962 4014 3548
Analytical Lab: Accutest
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

2-6

FA6464: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 6464 CLIENT: BHATE PROJECT: SS-61

DATE/TIME RECEIVED: 7-17-13 10:00 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7962 4014 3504

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [X] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [X] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [X] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 8.2
- [ ] CORRECTED TEMPS: 8.6

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] ~~INCORRECT NUMBER OF CONTAINERS USED~~
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 7-17-13 REVIEWER SIGNATURE/DATE 07/17/13

NF 12/10

receipt confirmation 122910.xls

5.1 5

FA6464: Chain of Custody

Page 2 of 2

Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-MB	P17522.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6464-1, FA6464-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-MB	P17522.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6464-1, FA6464-2

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-MB	P17522.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6464-1, FA6464-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

Blank Spike Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-BS	P17520.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6464-1, FA6464-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	188	150*	50-147
107-02-8	Acrolein	125	189	151	31-154
107-13-1	Acrylonitrile	125	112	90	58-126
71-43-2	Benzene	25	25.8	103	81-122
108-86-1	Bromobenzene	25	25.7	103	80-121
74-97-5	Bromochloromethane	25	23.9	96	76-123
75-27-4	Bromodichloromethane	25	25.1	100	79-123
75-25-2	Bromoform	25	25.6	102	66-123
104-51-8	n-Butylbenzene	25	26.9	108	79-126
135-98-8	sec-Butylbenzene	25	30.4	122	83-133
98-06-6	tert-Butylbenzene	25	29.6	118	80-133
108-90-7	Chlorobenzene	25	26.9	108	82-124
75-00-3	Chloroethane	25	24.4	98	62-144
67-66-3	Chloroform	25	24.9	100	80-124
95-49-8	o-Chlorotoluene	25	28.2	113	81-127
106-43-4	p-Chlorotoluene	25	29.7	119	83-130
110-75-8	2-Chloroethyl vinyl ether	125	110	88	56-122
75-15-0	Carbon disulfide	25	31.6	126	66-148
56-23-5	Carbon tetrachloride	25	26.7	107	76-136
75-34-3	1,1-Dichloroethane	25	26.1	104	81-122
75-35-4	1,1-Dichloroethylene	25	29.6	118	78-137
563-58-6	1,1-Dichloropropene	25	27.7	111	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	26.0	104	64-123
106-93-4	1,2-Dibromoethane	25	24.7	99	75-120
107-06-2	1,2-Dichloroethane	25	24.5	98	75-125
78-87-5	1,2-Dichloropropane	25	25.4	102	76-124
142-28-9	1,3-Dichloropropane	25	24.5	98	80-118
594-20-7	2,2-Dichloropropane	25	26.7	107	74-139
124-48-1	Dibromochloromethane	25	25.4	102	78-122
75-71-8	Dichlorodifluoromethane	25	24.9	100	42-167
156-59-2	cis-1,2-Dichloroethylene	25	26.0	104	78-120
10061-01-5	cis-1,3-Dichloropropene	25	24.6	98	75-118
541-73-1	m-Dichlorobenzene	25	28.2	113	84-125
95-50-1	o-Dichlorobenzene	25	27.2	109	82-124
106-46-7	p-Dichlorobenzene	25	26.3	105	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.8	107	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-BS	P17520.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6464-1, FA6464-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	26.1	104	80-120
100-41-4	Ethylbenzene	25	26.2	105	81-121
591-78-6	2-Hexanone	125	139	111	61-129
87-68-3	Hexachlorobutadiene	25	30.4	122	75-142
110-54-3	Hexane	25	28.4	114	69-132
98-82-8	Isopropylbenzene	25	29.6	118	83-132
99-87-6	p-Isopropyltoluene	25	28.6	114	79-130
108-10-1	4-Methyl-2-pentanone	125	130	104	66-122
74-83-9	Methyl bromide	25	23.7	95	59-143
74-87-3	Methyl chloride	25	21.9	88	50-159
74-95-3	Methylene bromide	25	25.2	101	78-119
75-09-2	Methylene chloride	25	25.4	102	69-135
78-93-3	Methyl ethyl ketone	125	140	112	56-143
1634-04-4	Methyl Tert Butyl Ether	25	24.6	98	72-117
91-20-3	Naphthalene	25	25.5	102	63-132
103-65-1	n-Propylbenzene	25	30.0	120	82-133
100-42-5	Styrene	25	25.4	102	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.4	102	77-122
71-55-6	1,1,1-Trichloroethane	25	26.1	104	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	24.4	98	72-120
79-00-5	1,1,2-Trichloroethane	25	25.3	101	76-119
87-61-6	1,2,3-Trichlorobenzene	25	25.3	101	68-131
96-18-4	1,2,3-Trichloropropane	25	24.7	99	77-120
120-82-1	1,2,4-Trichlorobenzene	25	25.6	102	73-129
95-63-6	1,2,4-Trimethylbenzene	25	26.1	104	79-120
108-67-8	1,3,5-Trimethylbenzene	25	26.8	107	79-120
127-18-4	Tetrachloroethylene	25	34.0	136* [a]	76-135
108-88-3	Toluene	25	25.6	102	80-120
79-01-6	Trichloroethylene	25	27.7	111	81-126
75-69-4	Trichlorofluoromethane	25	26.7	107	71-156
75-01-4	Vinyl chloride	25	25.9	104	69-159
108-05-4	Vinyl Acetate	125	114	91	43-154
	m,p-Xylene	50	56.7	113	79-126
95-47-6	o-Xylene	25	28.6	114	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-BS	P17520.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6464-1, FA6464-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	102%	83-118%

(a) Sporadic marginal failure.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6352-24MS	P17540.D	1	07/17/13	EG	n/a	n/a	VP669
FA6352-24MSD	P17541.D	1	07/18/13	EG	n/a	n/a	VP669
FA6352-24	P17531.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6464-1, FA6464-2

CAS No.	Compound	FA6352-24 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	109	87	116	93	6	50-147/21
107-02-8	Acrolein	ND		125	171	137	144	115	17	31-154/29
107-13-1	Acrylonitrile	ND		125	108	86	109	87	1	58-126/16
71-43-2	Benzene	ND		25	26.7	107	25.7	103	4	81-122/14
108-86-1	Bromobenzene	ND		25	24.8	99	24.9	100	0	80-121/14
74-97-5	Bromochloromethane	ND		25	24.9	100	25.3	101	2	76-123/14
75-27-4	Bromodichloromethane	ND		25	25.7	103	22.1	88	15	79-123/19
75-25-2	Bromoform	ND		25	22.1	88	18.9	76	16	66-123/21
104-51-8	n-Butylbenzene	ND		25	24.2	97	24.0	96	1	79-126/16
135-98-8	sec-Butylbenzene	ND		25	28.8	115	27.9	112	3	83-133/16
98-06-6	tert-Butylbenzene	ND		25	28.7	115	27.3	109	5	80-133/16
108-90-7	Chlorobenzene	ND		25	26.8	107	25.9	104	3	82-124/14
75-00-3	Chloroethane	ND		25	24.5	98	24.6	98	0	62-144/20
67-66-3	Chloroform	0.75	J	25	26.7	104	26.2	102	2	80-124/15
95-49-8	o-Chlorotoluene	ND		25	27.4	110	27.0	108	1	81-127/15
106-43-4	p-Chlorotoluene	ND		25	28.5	114	27.9	112	2	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		125	ND	0*	ND	0*	nc	56-122/23
75-15-0	Carbon disulfide	ND		25	28.3	113	23.7	95	18	66-148/23
56-23-5	Carbon tetrachloride	ND		25	28.4	114	24.1	96	16	76-136/23
75-34-3	1,1-Dichloroethane	ND		25	26.6	106	26.0	104	2	81-122/15
75-35-4	1,1-Dichloroethylene	ND		25	30.5	122	30.3	121	1	78-137/18
563-58-6	1,1-Dichloropropene	ND		25	28.2	113	27.1	108	4	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	24.0	96	22.0	88	9	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	24.8	99	24.4	98	2	75-120/13
107-06-2	1,2-Dichloroethane	ND		25	25.8	103	25.9	104	0	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	25.4	102	25.7	103	1	76-124/14
142-28-9	1,3-Dichloropropane	ND		25	24.0	96	23.7	95	1	80-118/13
594-20-7	2,2-Dichloropropane	ND		25	24.7	99	24.0	96	3	74-139/17
124-48-1	Dibromochloromethane	ND		25	23.9	96	20.2	81	17	78-122/19
75-71-8	Dichlorodifluoromethane	ND		25	22.4	90	22.3	89	0	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND		25	25.9	104	25.5	102	2	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	23.3	93	20.5	82	13	75-118/23
541-73-1	m-Dichlorobenzene	ND		25	26.3	105	25.8	103	2	84-125/14
95-50-1	o-Dichlorobenzene	ND		25	26.5	106	25.7	103	3	82-124/14
106-46-7	p-Dichlorobenzene	ND		25	25.1	100	24.7	99	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	27.3	109	26.2	105	4	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6352-24MS	P17540.D	1	07/17/13	EG	n/a	n/a	VP669
FA6352-24MSD	P17541.D	1	07/18/13	EG	n/a	n/a	VP669
FA6352-24	P17531.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6464-1, FA6464-2

CAS No.	Compound	FA6352-24 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		25	24.9	100	21.9	88	13	80-120/22
100-41-4	Ethylbenzene	ND		25	25.8	103	24.8	99	4	81-121/14
591-78-6	2-Hexanone	ND		125	120	96	123	98	2	61-129/18
87-68-3	Hexachlorobutadiene	ND		25	24.1	96	25.5	102	6	75-142/19
110-54-3	Hexane	ND		25	26.1	104	23.9	96	9	69-132/20
98-82-8	Isopropylbenzene	ND		25	29.0	116	27.9	112	4	83-132/15
99-87-6	p-Isopropyltoluene	ND		25	27.2	109	26.5	106	3	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		125	124	99	129	103	4	66-122/16
74-83-9	Methyl bromide	ND		25	23.4	94	23.5	94	0	59-143/19
74-87-3	Methyl chloride	ND		25	22.2	89	22.5	90	1	50-159/19
74-95-3	Methylene bromide	ND		25	24.8	99	25.5	102	3	78-119/14
75-09-2	Methylene chloride	ND		25	26.9	108	26.4	106	2	69-135/16
78-93-3	Methyl ethyl ketone	ND		125	111	89	120	96	8	56-143/18
1634-04-4	Methyl Tert Butyl Ether	0.91	J	25	25.5	98	25.9	100	2	72-117/14
91-20-3	Naphthalene	ND		25	21.9	88	24.0	96	9	63-132/25
103-65-1	n-Propylbenzene	ND		25	28.9	116	28.5	114	1	82-133/15
100-42-5	Styrene	ND		25	24.4	98	23.1	92	5	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		25	26.0	104	23.1	92	12	77-122/19
71-55-6	1,1,1-Trichloroethane	ND		25	27.6	110	26.8	107	3	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	23.4	94	24.5	98	5	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		25	24.1	96	23.7	95	2	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	21.5	86	23.0	92	7	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		25	22.9	92	24.1	96	5	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		25	22.7	91	23.3	93	3	73-129/20
95-63-6	1,2,4-Trimethylbenzene	ND		25	25.4	102	24.1	96	5	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		25	25.3	101	24.0	96	5	79-120/19
127-18-4	Tetrachloroethylene	0.52	J	25	25.0	98	22.7	89	10	76-135/16
108-88-3	Toluene	ND		25	25.1	100	24.1	96	4	80-120/14
79-01-6	Trichloroethylene	ND		25	28.5	114	29.1	116	2	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	27.1	108	25.9	104	5	71-156/21
75-01-4	Vinyl chloride	ND		25	24.2	97	25.3	101	4	69-159/18
108-05-4	Vinyl Acetate	ND		125	119	95	119	95	0	43-154/14
	m,p-Xylene	ND		50	55.4	111	52.5	105	5	79-126/15
95-47-6	o-Xylene	ND		25	28.0	112	26.7	107	5	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6352-24MS	P17540.D	1	07/17/13	EG	n/a	n/a	VP669
FA6352-24MSD	P17541.D	1	07/18/13	EG	n/a	n/a	VP669
FA6352-24	P17531.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6464-1, FA6464-2

CAS No.	Surrogate Recoveries	MS	MSD	FA6352-24	Limits
1868-53-7	Dibromofluoromethane	101%	101%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	101%	99%	79-125%
2037-26-5	Toluene-D8	99%	97%	99%	85-112%
460-00-4	4-Bromofluorobenzene	99%	102%	108%	83-118%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MB	X029495.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6464-1

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MB	X029495.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6464-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MB	X029495.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6464-1

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	43%	14-67%
4165-62-2	Phenol-d5	28%	10-50%
118-79-6	2,4,6-Tribromophenol	90%	33-118%
4165-60-0	Nitrobenzene-d5	75%	42-108%
321-60-8	2-Fluorobiphenyl	80%	40-106%
1718-51-0	Terphenyl-d14	91%	39-121%

Blank Spike Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-BS	X029494.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6464-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	19.5	20	10-69
95-57-8	2-Chlorophenol	50	36.0	72	52-98
59-50-7	4-Chloro-3-methyl phenol	50	35.6	71	54-103
120-83-2	2,4-Dichlorophenol	50	38.3	77	53-103
105-67-9	2,4-Dimethylphenol	50	30.7	61	43-90
51-28-5	2,4-Dinitrophenol	100	76.1	76	44-112
534-52-1	4,6-Dinitro-o-cresol	100	96.4	96	66-121
95-48-7	2-Methylphenol	50	30.5	61	43-90
	3&4-Methylphenol	100	60.3	60	36-88
88-75-5	2-Nitrophenol	50	35.2	70	53-102
100-02-7	4-Nitrophenol	100	36.1	36	18-62
87-86-5	Pentachlorophenol	100	89.3	89	61-115
108-95-2	Phenol	50	19.3	39	19-56
95-95-4	2,4,5-Trichlorophenol	50	43.9	88	62-109
88-06-2	2,4,6-Trichlorophenol	50	42.5	85	59-107
83-32-9	Acenaphthene	50	43.0	86	61-107
208-96-8	Acenaphthylene	50	42.1	84	60-104
62-53-3	Aniline	50	32.8	66	47-100
120-12-7	Anthracene	50	42.3	85	65-108
92-87-5	Benzidine	50	30.2	60	25-99
56-55-3	Benzo(a)anthracene	50	43.2	86	66-111
50-32-8	Benzo(a)pyrene	50	39.9	80	62-107
205-99-2	Benzo(b)fluoranthene	50	43.2	86	65-114
191-24-2	Benzo(g,h,i)perylene	50	42.4	85	66-116
207-08-9	Benzo(k)fluoranthene	50	43.8	88	65-114
101-55-3	4-Bromophenyl phenyl ether	50	47.4	95	65-109
85-68-7	Butyl benzyl phthalate	50	43.2	86	65-112
100-51-6	Benzyl Alcohol	50	31.1	62	46-94
91-58-7	2-Chloronaphthalene	50	42.7	85	57-103
106-47-8	4-Chloroaniline	50	34.2	68	49-105
86-74-8	Carbazole	50	38.1	76	59-113
218-01-9	Chrysene	50	44.7	89	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	36.6	73	51-102
111-44-4	bis(2-Chloroethyl)ether	50	37.6	75	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	39.5	79	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	45.3	91	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-BS	X029494.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6464-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	39.5	79	48-97
122-66-7	1,2-Diphenylhydrazine	50	44.6	89	61-110
541-73-1	1,3-Dichlorobenzene	50	39.2	78	45-95
106-46-7	1,4-Dichlorobenzene	50	40.1	80	45-98
121-14-2	2,4-Dinitrotoluene	50	41.3	83	61-110
606-20-2	2,6-Dinitrotoluene	50	41.5	83	63-108
91-94-1	3,3'-Dichlorobenzidine	50	39.7	79	46-117
53-70-3	Dibenzo(a,h)anthracene	50	41.1	82	66-119
132-64-9	Dibenzofuran	50	43.0	86	61-106
84-74-2	Di-n-butyl phthalate	50	38.4	77	65-107
117-84-0	Di-n-octyl phthalate	50	42.8	86	62-118
84-66-2	Diethyl phthalate	50	46.2	92	64-108
131-11-3	Dimethyl phthalate	50	43.6	87	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	41.9	84	61-117
206-44-0	Fluoranthene	50	37.4	75	63-106
86-73-7	Fluorene	50	45.2	90	62-108
118-74-1	Hexachlorobenzene	50	45.9	92	63-108
87-68-3	Hexachlorobutadiene	50	40.6	81	42-102
77-47-4	Hexachlorocyclopentadiene	50	35.4	71	39-102
67-72-1	Hexachloroethane	50	40.5	81	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	42.4	85	64-119
78-59-1	Isophorone	50	35.5	71	43-87
90-12-0	1-Methylnaphthalene	50	38.9	78	53-102
91-57-6	2-Methylnaphthalene	50	39.5	79	51-102
88-74-4	2-Nitroaniline	50	40.2	80	54-128
99-09-2	3-Nitroaniline	50	37.1	74	56-106
100-01-6	4-Nitroaniline	50	38.7	77	55-120
91-20-3	Naphthalene	50	37.0	74	47-100
98-95-3	Nitrobenzene	50	34.9	70	50-104
62-75-9	N-Nitrosodimethylamine	50	25.9	52	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	35.8	72	52-104
86-30-6	N-Nitrosodiphenylamine	50	42.3	85	64-108
85-01-8	Phenanthrene	50	43.7	87	66-110
129-00-0	Pyrene	50	44.3	89	64-113
110-86-1	Pyridine	50	18.6	37	23-74
120-82-1	1,2,4-Trichlorobenzene	50	37.9	76	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-BS	X029494.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6464-1

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	49%	14-67%
4165-62-2	Phenol-d5	32%	10-50%
118-79-6	2,4,6-Tribromophenol	92%	33-118%
4165-60-0	Nitrobenzene-d5	71%	42-108%
321-60-8	2-Fluorobiphenyl	85%	40-106%
1718-51-0	Terphenyl-d14	92%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MS	X029505.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
OP47835-MSD	X029506.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
FA6461-5	X029504.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6464-1

CAS No.	Compound	FA6461-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		200	81.4	41	83.7	42	3	10-69/39
95-57-8	2-Chlorophenol	ND		100	80.6	81	69.1	69	15	52-98/25
59-50-7	4-Chloro-3-methyl phenol	ND		100	82.0	82	72.6	73	12	54-103/23
120-83-2	2,4-Dichlorophenol	ND		100	85.4	85	74.3	74	14	53-103/26
105-67-9	2,4-Dimethylphenol	ND		100	71.1	71	61.8	62	14	43-90/27
51-28-5	2,4-Dinitrophenol	ND		200	176	88	155	78	13	44-112/25
534-52-1	4,6-Dinitro-o-cresol	ND		200	217	109	186	93	15	66-121/23
95-48-7	2-Methylphenol	ND		100	72.8	73	66.1	66	10	43-90/28
	3&4-Methylphenol	ND		200	148	74	134	67	10	36-88/28
88-75-5	2-Nitrophenol	ND		100	78.4	78	67.0	67	16	53-102/29
100-02-7	4-Nitrophenol	ND		200	112	56	109	55	3	18-62/33
87-86-5	Pentachlorophenol	ND		200	200	100	178	89	12	61-115/26
108-95-2	Phenol	ND		100	52.7	53	51.3	51	3	19-56/35
95-95-4	2,4,5-Trichlorophenol	ND		100	96.1	96	82.8	83	15	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		100	93.1	93	80.1	80	15	59-107/23
83-32-9	Acenaphthene	ND		100	94.3	94	80.7	81	16	61-107/22
208-96-8	Acenaphthylene	ND		100	93.4	93	79.8	80	16	60-104/22
62-53-3	Aniline	ND		100	70.3	70	63.7	64	10	47-100/30
120-12-7	Anthracene	ND		100	91.8	92	80.7	81	13	65-108/20
92-87-5	Benzidine	ND		100	17.1	17*	25.7	26	40*	25-99/31
56-55-3	Benzo(a)anthracene	ND		100	95.5	96	81.9	82	15	66-111/22
50-32-8	Benzo(a)pyrene	ND		100	90.0	90	76.3	76	16	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		100	97.3	97	83.4	83	15	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		100	96.7	97	83.4	83	15	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		100	97.4	97	84.3	84	14	65-114/24
101-55-3	4-Bromophenyl phenyl ether	ND		100	100	100	87.7	88	13	65-109/23
85-68-7	Butyl benzyl phthalate	ND		100	94.2	94	82.0	82	14	65-112/24
100-51-6	Benzyl Alcohol	ND		100	73.7	74	66.2	66	11	46-94/27
91-58-7	2-Chloronaphthalene	ND		100	93.0	93	80.1	80	15	57-103/23
106-47-8	4-Chloroaniline	ND		100	65.4	65	60.1	60	8	49-105/27
86-74-8	Carbazole	ND		100	84.3	84	75.0	75	12	59-113/21
218-01-9	Chrysene	ND		100	98.3	98	84.5	85	15	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	ND		100	80.8	81	69.4	69	15	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		100	82.5	83	69.1	69	18	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	87.6	88	75.8	76	14	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	100	100	87.1	87	14	62-105/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MS	X029505.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
OP47835-MSD	X029506.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
FA6461-5	X029504.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6464-1

CAS No.	Compound	FA6461-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		100	88.9	89	75.8	76	16	48-97/24
122-66-7	1,2-Diphenylhydrazine	ND		100	93.8	94	82.5	83	13	61-110/24
541-73-1	1,3-Dichlorobenzene	ND		100	89.3	89	75.2	75	17	45-95/25
106-46-7	1,4-Dichlorobenzene	ND		100	89.3	89	76.5	77	15	45-98/25
121-14-2	2,4-Dinitrotoluene	ND		100	93.1	93	80.7	81	14	61-110/21
606-20-2	2,6-Dinitrotoluene	ND		100	91.9	92	79.1	79	15	63-108/21
91-94-1	3,3'-Dichlorobenzidine	ND		100	74.6	75	70.0	70	6	46-117/29
53-70-3	Dibenzo(a,h)anthracene	ND		100	93.5	94	78.5	79	17	66-119/24
132-64-9	Dibenzofuran	ND		100	94.1	94	81.8	82	14	61-106/21
84-74-2	Di-n-butyl phthalate	ND		100	84.0	84	73.3	73	14	65-107/21
117-84-0	Di-n-octyl phthalate	ND		100	93.6	94	79.2	79	17	62-118/24
84-66-2	Diethyl phthalate	ND		100	103	103	88.9	89	15	64-108/21
131-11-3	Dimethyl phthalate	ND		100	96.2	96	84.6	85	13	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	90.7	91	79.5	80	13	61-117/23
206-44-0	Fluoranthene	ND		100	83.4	83	72.6	73	14	63-106/21
86-73-7	Fluorene	ND		100	99.7	100	85.4	85	15	62-108/20
118-74-1	Hexachlorobenzene	ND		100	97.0	97	86.2	86	12	63-108/22
87-68-3	Hexachlorobutadiene	ND		100	88.8	89	77.3	77	14	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND		100	76.7	77	64.9	65	17	39-102/29
67-72-1	Hexachloroethane	ND		100	90.6	91	78.2	78	15	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	95.6	96	82.6	83	15	64-119/24
78-59-1	Isophorone	ND		100	78.7	79	68.8	69	13	43-87/25
90-12-0	1-Methylnaphthalene	ND		100	86.0	86	75.3	75	13	53-102/27
91-57-6	2-Methylnaphthalene	ND		100	87.8	88	76.7	77	13	51-102/26
88-74-4	2-Nitroaniline	ND		100	89.1	89	77.2	77	14	54-128/24
99-09-2	3-Nitroaniline	ND		100	73.0	73	67.5	68	8	56-106/27
100-01-6	4-Nitroaniline	ND		100	91.1	91	80.9	81	12	55-120/24
91-20-3	Naphthalene	ND		100	81.3	81	71.5	72	13	47-100/29
98-95-3	Nitrobenzene	ND		100	77.4	77	67.1	67	14	50-104/28
62-75-9	N-Nitrosodimethylamine	ND		100	69.0	69	65.0	65	6	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	ND		100	80.0	80	68.8	69	15	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND		100	90.0	90	79.2	79	13	64-108/23
85-01-8	Phenanthrene	ND		100	94.6	95	82.7	83	13	66-110/21
129-00-0	Pyrene	ND		100	94.4	94	82.8	83	13	64-113/23
110-86-1	Pyridine	ND		100	45.7	46	43.9	44	4	23-74/34
120-82-1	1,2,4-Trichlorobenzene	ND		100	84.7	85	73.6	74	14	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MS	X029505.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
OP47835-MSD	X029506.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
FA6461-5	X029504.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6464-1

CAS No.	Surrogate Recoveries	MS	MSD	FA6461-5	Limits
367-12-4	2-Fluorophenol	61%	57%	34%	14-67%
4165-62-2	Phenol-d5	45%	44%	24%	10-50%
118-79-6	2,4,6-Tribromophenol	96%	84%	71%	33-118%
4165-60-0	Nitrobenzene-d5	74%	64%	57%	42-108%
321-60-8	2-Fluorobiphenyl	89%	76%	61%	40-106%
1718-51-0	Terphenyl-d14	90%	82%	68%	39-121%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5020-MB	CD123054.D	1	07/19/13	CP	n/a	n/a	GCD5020

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6464-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	91%	70-131%
98-08-8	aaa-Trifluorotoluene	80%	69-143%

Blank Spike Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5020-BS	CD123053.D	1	07/19/13	CP	n/a	n/a	GCD5020

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6464-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.378	95	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	105%	70-131%
98-08-8	aaa-Trifluorotoluene	107%	69-143%

8.2.1

8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6507-1MS	CD123061.D	1	07/19/13	CP	n/a	n/a	GCD5020
FA6507-1MSD	CD123062.D	1	07/19/13	CP	n/a	n/a	GCD5020
FA6507-1	CD123055.D	1	07/19/13	CP	n/a	n/a	GCD5020

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6464-1

CAS No.	Compound	FA6507-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.0633	J	0.4	0.433	92	0.431	92	0	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA6507-1	Limits
460-00-4	4-Bromofluorobenzene	107%	105%	101%	70-131%
98-08-8	aaa-Trifluorotoluene	108%	108%	90%	69-143%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-MB	LL49491.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6464-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	90%	50-131%

Blank Spike Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-BS	LL49490.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6464-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.843	84	56-123
	TPH (> C22-C36)	1	0.883	88	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	110%	50-131%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6464
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-MS	LL49516.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870
OP47901-MSD	LL49517.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870
FA6510-3	LL49515.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6464-1

CAS No.	Compound	FA6510-3 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	6.62		1.92	8.13	79	7.32	36* [a]	10	56-123/33
	TPH (> C22-C36)	ND		1.92	1.75	91	1.63	85	7	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA6510-3	Limits
84-15-1	o-Terphenyl	108%	96%	95%	50-131%

(a) Outside control limits due to high level in sample relative to spike amount.

9.3.1

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* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA6464
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:					07/24/13		07/24/13		07/24/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Aluminum	200	15	15						
Antimony	6.0	1.3	1.3						
Arsenic	10	1.6	2.5						
Barium	200	1	1						
Beryllium	4.0	.5	.5						
Cadmium	5.0	.5	.5						
Calcium	1000	50	50						
Chromium	10	1.8	2						
Cobalt	50	.5	.5						
Copper	25	1	1						
Iron	300	29	29	-9.3	<300				
Lead	5.0	1.1	1.1						
Magnesium	5000	74	74						
Manganese	15	.7	.7	-0.10	<15	-0.10	<15	-0.20	<15
Molybdenum	50	.6	1						
Nickel	40	.5	.5						
Potassium	10000	200	200						
Selenium	10	2	2						
Silver	10	.5	.5						
Sodium	10000	500	500						
Strontium	10	.5	.5						
Thallium	10	1.3	1.3						
Tin	50	.7	1.8						
Titanium	10	.9	1						
Vanadium	50	.5	1						
Zinc	20	3	5						

Associated samples MP25542: FA6464-1, FA6464-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA6464
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			07/24/13					07/24/13	
Metal	FA6464-1 Original	DUP	RPD	QC Limits	FA6464-1 Original	MS	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron	367	358	2.5	0-20	367	23500	26000	89.0	70-130
Lead									
Magnesium									
Manganese	553	543	1.8	0-20	553	998	500	89.0	70-130
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP25542: FA6464-1, FA6464-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA6464
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	FA6464-1 Original	MSD	Spikelot MPFLICP1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	367	23200	26000	87.8	1.3	20
Lead						
Magnesium						
Manganese	553	981	500	85.6	1.7	20
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP25542: FA6464-1, FA6464-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA6464
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	BSP Result	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	25600	26000	98.5	85-115
Lead				
Magnesium				
Manganese	501	500	100.2	85-115
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP25542: FA6464-1, FA6464-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA6464
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	FA6464-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	367	332	9.6	0-10
Lead				
Magnesium				
Manganese	553	575	3.9	0-10
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP25542: FA6464-1, FA6464-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA6464
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	Sample ml	Final ml	FA6464-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10	366.6	359.268	3087	0.2	150	3000	90.9	85-115
Lead										
Magnesium										
Manganese	9.8	10	553.3	542.234	583.5	0.2	2.5	50	82.5*(a)	85-115
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP25542: FA6464-1, FA6464-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6464
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP22091/GN56890	2.0	0.0	mg/l	198	184	93.1	85-115%
Chemical Oxygen Demand	GP22148/GN56910	20	0.0	mg/l	750	729	97.2	87-122%
Chloride	GP22107/GN56829	2.0	0.0	mg/l	50	50.9	101.8	90-110%
Iron, Ferrous	GN56801	0.10	0.0	mg/l	.500	0.52	103.9	82-115%
Nitrogen, Ammonia	GP22175/GN56993	0.10	0.0	mg/l	2.5	2.56	102.4	90-110%
Nitrogen, Nitrate	GP22107/GN56829	0.10	0.0	mg/l	2.5	2.54	101.6	90-110%
Nitrogen, Nitrite	GP22107/GN56829	0.10	0.0	mg/l	2.5	2.64	105.6	90-110%
Nitrogen, Total Kjeldahl	GP22096/GN56874	0.53	0.0	mg/l	2.63	2.72	103.6	90-110%
Solids, Total Dissolved	GN56888	100	0.0	mg/l				
Sulfate	GP22107/GN56829	2.0	0.0	mg/l	50	49.7	99.4	90-110%

Associated Samples:
Batch GN56801: FA6464-1
Batch GN56832: FA6464-1
Batch GN56888: FA6464-1
Batch GP22091: FA6464-1
Batch GP22096: FA6464-1
Batch GP22107: FA6464-1
Batch GP22148: FA6464-1
Batch GP22175: FA6464-1
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6464
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP22091/GN56890	FA6468-1	mg/l	2.0 U	2.3	28.9	0-30%
Iron, Ferrous	GN56801	FA6437-21	mg/l	0.10	0.12	17.4	0-31%
Solids, Total Dissolved	GN56888	FA6570-1	mg/l	4670	4670	0.0	0-5%

Associated Samples:
Batch GN56801: FA6464-1
Batch GN56888: FA6464-1
Batch GP22091: FA6464-1
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6464
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP22148/GN56910	FA6464-1	mg/l	396	750	1100	94.4	87-122%
Chloride	GP22107/GN56829	FA6471-5	mg/l	1580	50	1600	40.0(a)	90-110%
Nitrogen, Ammonia	GP22175/GN56993	FA6573-1	mg/l	0.0	5	5.1	102.0	90-110%
Nitrogen, Nitrate	GP22107/GN56829	FA6471-5	mg/l	5.0 U	2.5	6.1	244.0N(b)	90-110%
Nitrogen, Nitrite	GP22107/GN56829	FA6471-5	mg/l	5.0 U	2.5	5.5	220.0N(b)	90-110%
Nitrogen, Total Kjeldahl	GP22096/GN56874	FA6420-10	mg/l	2.8	2.63	5.1	87.6N(b)	90-110%
Sulfate	GP22107/GN56829	FA6471-5	mg/l	4540	50	4470	-140.0(a)	90-110%

Associated Samples:
Batch GN56832: FA6464-1
Batch GP22096: FA6464-1
Batch GP22107: FA6464-1
Batch GP22148: FA6464-1
Batch GP22175: FA6464-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6464
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chemical Oxygen Demand	GP22148/GN56910	FA6464-1	mg/l	396	750	1150	3.7	26%
Chloride	GP22107/GN56829	FA6471-5	mg/l	1580	50	1600	0.0	20%
Nitrogen, Ammonia	GP22175/GN56993	FA6573-1	mg/l	0.0	5	5.1	0.0	20%
Nitrogen, Nitrate	GP22107/GN56829	FA6471-5	mg/l	5.0 U	2.5	6.3	3.2	20%
Nitrogen, Nitrite	GP22107/GN56829	FA6471-5	mg/l	5.0 U	2.5	5.6	1.8	20%
Nitrogen, Total Kjeldahl	GP22096/GN56874	FA6420-10	mg/l	2.8	2.63	5.3	3.8	20%
Sulfate	GP22107/GN56829	FA6471-5	mg/l	4540	50	4480	0.2	20%

Associated Samples:
Batch GN56832: FA6464-1
Batch GP22096: FA6464-1
Batch GP22107: FA6464-1
Batch GP22148: FA6464-1
Batch GP22175: FA6464-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Southeast ACCUTEST LABORATORIES

08/12/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA6468

Sampling Date: 07/16/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **65**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

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Accutest LabLink@144167 12:45 12-Aug-2013

Sample Summary

Bhate Environmental

Job No: FA6468

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA6468-1	07/16/13	10:15	DMZB	07/17/13	AQ	Ground Water	SS61-MW30
FA6468-1F	07/16/13	10:15	DMZB	07/17/13	AQ	Groundwater Filtered	SS61-MW30
FA6468-2	07/16/13	00:00	DMZB	07/17/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA6468

Site: Holloman AFB; SS61 VCM **Report Date** 7/31/2013 5:32:57 PM

1 Sample and 1 Trip Blank were collected on 07/16/2013 and were received at Accutest SE on 07/17/2013 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA6468. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in theResults Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to
QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VP669

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6352-24MS, FA6352-24MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acetone, Tetrachloroethylene are outside control limits. Blank Spike recoveries are biased high. Analytes are non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Probable cause is due to matrix interference.

VP669-BS for Tetrachloroethylene: Sporadic marginal failure.

FA6468-1 for Acetone: Associated BS recovery outside control limits.

FA6468-1 for Tetrachloroethylene: Associated BS recovery outside control limits.

FA6468-2 for Acetone: Associated BS recovery outside control limits.

FA6468-2 for Tetrachloroethylene: Associated BS recovery outside control limits.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP47835

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6461-5MS, FA6461-5MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Benzidine are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Benzidine are outside control limits for sample OP47835-MSD. Probable cause is due to sample non-homogeneity.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD5020

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6507-1MS, FA6507-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP47901

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6510-3MS, FA6510-3MSD were used as the QC samples indicated.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP25542

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6464-1DUP, FA6464-1MS, FA6464-1MSD, FA6464-1PS, FA6464-1SDL were used as the QC samples for metals.

MP25542-PS1 for Manganese: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP22107

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6471-5MS, FA6471-5MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

Matrix Spike Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Recovery(s) for Sulfate are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

FA6468-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP22191

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6713-1MS, FA6713-1MSD were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP22096

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6420-10MS, FA6420-10MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Matrix Spike Recovery(s) for Nitrogen, Total Kjeldahl are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN56801

All method blanks for this batch meet method specific criteria.

Sample(s) FA6437-21DUP was used as the QC samples for Iron, Ferrous.

FA6468-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R31430

FA6468-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN56888

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6570-1DUP was used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP22091

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6468-1DUP was used as the QC samples for BOD, 5 Day.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP22147

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6573-1MS, FA6573-1MSD were used as the QC samples for Chemical Oxygen Demand.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: July 31, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA6468
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/16/13

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA6468-1	**SS61-MW30**					
tert-Butylbenzene		0.30 J	1.0	0.29	ug/l	SW846 8260B
Chloroform		0.51 J	1.0	0.26	ug/l	SW846 8260B
1,2-Dichloroethane		28.9	1.0	0.22	ug/l	SW846 8260B
Iron		335	300	29	ug/l	EPA 200.7
Manganese		1640	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		89.7	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.34 J	0.40	0.059	mg/l	SM18 3500FED M
Nitrogen, Total Kjeldahl		2.7	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		16500	1000	100	mg/l	SM19 2540C
Sulfate		3420	400	120	mg/l	EPA 300/SW846 9056A
FA6468-1F	**SS61-MW30**					
Manganese		1570	15	0.70	ug/l	EPA 200.7
FA6468-2	**TRIP BLANK**					
Toluene		0.25 J	1.0	0.20	ug/l	SW846 8260B

(a) Calculated as: (Iron) - (Iron, Ferrous)

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P17538.D	1	07/17/13	EG	n/a	n/a	VP669
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.30	1.0	0.29	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	0.51	1.0	0.26	ug/l	J
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	28.9	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene [a]	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X029540.D	1	07/22/13	FS	07/18/13	OP47835	SX1409
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	31%		14-67%
4165-62-2	Phenol-d5	29%		10-50%
118-79-6	2,4,6-Tribromophenol	85%		33-118%
4165-60-0	Nitrobenzene-d5	65%		42-108%
321-60-8	2-Fluorobiphenyl	69%		40-106%
1718-51-0	Terphenyl-d14	73%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123060.D	1	07/19/13	CP	n/a	n/a	GCD5020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		70-131%
98-08-8	aaa-Trifluorotoluene	90%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49506.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.24	0.096	mg/l	
	TPH (> C22-C36)	ND	0.24	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	335	300	29	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	1640	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/17/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	2.0 U	4.0	2.0	mg/l	2	07/17/13 16:20	KC	SM19 5210B
Chemical Oxygen Demand	89.7	20	5.3	mg/l	1	07/23/13 10:40	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	07/18/13 14:50	LE	SM18 4500/EPA 376.1
Iron, Ferric [a]	0.34 J	0.40	0.059	mg/l	1	07/24/13 17:33	LM	SM18 3500FED M
Iron, Ferrous [b]	0.030 U	0.10	0.030	mg/l	1	07/17/13 11:45	AC	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	07/30/13 12:16	VK	EPA 350.1
Nitrogen, Nitrate [c]	10 U	20	10	mg/l	200	07/17/13 18:47	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	2.7	0.53	0.17	mg/l	1	07/19/13 11:28	MG	EPA 351.2
Solids, Total Dissolved	16500	1000	100	mg/l	10	07/22/13 13:35	KC	SM19 2540C
Sulfate	3420	400	120	mg/l	200	07/17/13 18:47	AA	EPA 300/SW846 9056A

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA6468-1F	**Date Sampled:**	07/16/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	07/17/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	1570	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6468-2	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P17525.D	1	07/17/13	EG	n/a	n/a	VP669
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6468-2	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene [a]	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.25	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6468-2	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/17/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENTAL CONSTRUCTION ENERGY
1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA6468

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07162013-01
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1	SS61-MW30	07/16/2013	1015	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				1
2	Trip Blank			-	TB	1	WQ	2	X													1

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. D. McNeil	7/16/13	1500	1. [illegible]		
2. [illegible]	07/17/13	1000	2. [illegible]	07/17/13	1000
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7962 4014 3504
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

28

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA6468: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA6468 CLIENT: B-Hate PROJECT: SS-61

DATE/TIME RECEIVED: 07-17-13 1000 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7962 4014 3504

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [x] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.4
- [ ] CORRECTED TEMPS: 2.8

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE R Miller 07-17-13 REVIEWER SIGNATURE/DATE [signature] 07/17/13

NF 12/10

receipt confirmation 122910.xls

5.1

5

FA6468: Chain of Custody

Page 2 of 2

Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-MB	P17522.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6468-1, FA6468-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-MB	P17522.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6468-1, FA6468-2

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-MB	P17522.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6468-1, FA6468-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

Blank Spike Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-BS	P17520.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6468-1, FA6468-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	188	150*	50-147
107-02-8	Acrolein	125	189	151	31-154
107-13-1	Acrylonitrile	125	112	90	58-126
71-43-2	Benzene	25	25.8	103	81-122
108-86-1	Bromobenzene	25	25.7	103	80-121
74-97-5	Bromochloromethane	25	23.9	96	76-123
75-27-4	Bromodichloromethane	25	25.1	100	79-123
75-25-2	Bromoform	25	25.6	102	66-123
104-51-8	n-Butylbenzene	25	26.9	108	79-126
135-98-8	sec-Butylbenzene	25	30.4	122	83-133
98-06-6	tert-Butylbenzene	25	29.6	118	80-133
108-90-7	Chlorobenzene	25	26.9	108	82-124
75-00-3	Chloroethane	25	24.4	98	62-144
67-66-3	Chloroform	25	24.9	100	80-124
95-49-8	o-Chlorotoluene	25	28.2	113	81-127
106-43-4	p-Chlorotoluene	25	29.7	119	83-130
110-75-8	2-Chloroethyl vinyl ether	125	110	88	56-122
75-15-0	Carbon disulfide	25	31.6	126	66-148
56-23-5	Carbon tetrachloride	25	26.7	107	76-136
75-34-3	1,1-Dichloroethane	25	26.1	104	81-122
75-35-4	1,1-Dichloroethylene	25	29.6	118	78-137
563-58-6	1,1-Dichloropropene	25	27.7	111	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	26.0	104	64-123
106-93-4	1,2-Dibromoethane	25	24.7	99	75-120
107-06-2	1,2-Dichloroethane	25	24.5	98	75-125
78-87-5	1,2-Dichloropropane	25	25.4	102	76-124
142-28-9	1,3-Dichloropropane	25	24.5	98	80-118
594-20-7	2,2-Dichloropropane	25	26.7	107	74-139
124-48-1	Dibromochloromethane	25	25.4	102	78-122
75-71-8	Dichlorodifluoromethane	25	24.9	100	42-167
156-59-2	cis-1,2-Dichloroethylene	25	26.0	104	78-120
10061-01-5	cis-1,3-Dichloropropene	25	24.6	98	75-118
541-73-1	m-Dichlorobenzene	25	28.2	113	84-125
95-50-1	o-Dichlorobenzene	25	27.2	109	82-124
106-46-7	p-Dichlorobenzene	25	26.3	105	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.8	107	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-BS	P17520.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6468-1, FA6468-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	26.1	104	80-120
100-41-4	Ethylbenzene	25	26.2	105	81-121
591-78-6	2-Hexanone	125	139	111	61-129
87-68-3	Hexachlorobutadiene	25	30.4	122	75-142
110-54-3	Hexane	25	28.4	114	69-132
98-82-8	Isopropylbenzene	25	29.6	118	83-132
99-87-6	p-Isopropyltoluene	25	28.6	114	79-130
108-10-1	4-Methyl-2-pentanone	125	130	104	66-122
74-83-9	Methyl bromide	25	23.7	95	59-143
74-87-3	Methyl chloride	25	21.9	88	50-159
74-95-3	Methylene bromide	25	25.2	101	78-119
75-09-2	Methylene chloride	25	25.4	102	69-135
78-93-3	Methyl ethyl ketone	125	140	112	56-143
1634-04-4	Methyl Tert Butyl Ether	25	24.6	98	72-117
91-20-3	Naphthalene	25	25.5	102	63-132
103-65-1	n-Propylbenzene	25	30.0	120	82-133
100-42-5	Styrene	25	25.4	102	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.4	102	77-122
71-55-6	1,1,1-Trichloroethane	25	26.1	104	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	24.4	98	72-120
79-00-5	1,1,2-Trichloroethane	25	25.3	101	76-119
87-61-6	1,2,3-Trichlorobenzene	25	25.3	101	68-131
96-18-4	1,2,3-Trichloropropane	25	24.7	99	77-120
120-82-1	1,2,4-Trichlorobenzene	25	25.6	102	73-129
95-63-6	1,2,4-Trimethylbenzene	25	26.1	104	79-120
108-67-8	1,3,5-Trimethylbenzene	25	26.8	107	79-120
127-18-4	Tetrachloroethylene	25	34.0	136* [a]	76-135
108-88-3	Toluene	25	25.6	102	80-120
79-01-6	Trichloroethylene	25	27.7	111	81-126
75-69-4	Trichlorofluoromethane	25	26.7	107	71-156
75-01-4	Vinyl chloride	25	25.9	104	69-159
108-05-4	Vinyl Acetate	125	114	91	43-154
	m,p-Xylene	50	56.7	113	79-126
95-47-6	o-Xylene	25	28.6	114	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP669-BS	P17520.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6468-1, FA6468-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	102%	83-118%

(a) Sporadic marginal failure.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6352-24MS	P17540.D	1	07/17/13	EG	n/a	n/a	VP669
FA6352-24MSD	P17541.D	1	07/18/13	EG	n/a	n/a	VP669
FA6352-24	P17531.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6468-1, FA6468-2

CAS No.	Compound	FA6352-24 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	109	87	116	93	6	50-147/21
107-02-8	Acrolein	ND		125	171	137	144	115	17	31-154/29
107-13-1	Acrylonitrile	ND		125	108	86	109	87	1	58-126/16
71-43-2	Benzene	ND		25	26.7	107	25.7	103	4	81-122/14
108-86-1	Bromobenzene	ND		25	24.8	99	24.9	100	0	80-121/14
74-97-5	Bromochloromethane	ND		25	24.9	100	25.3	101	2	76-123/14
75-27-4	Bromodichloromethane	ND		25	25.7	103	22.1	88	15	79-123/19
75-25-2	Bromoform	ND		25	22.1	88	18.9	76	16	66-123/21
104-51-8	n-Butylbenzene	ND		25	24.2	97	24.0	96	1	79-126/16
135-98-8	sec-Butylbenzene	ND		25	28.8	115	27.9	112	3	83-133/16
98-06-6	tert-Butylbenzene	ND		25	28.7	115	27.3	109	5	80-133/16
108-90-7	Chlorobenzene	ND		25	26.8	107	25.9	104	3	82-124/14
75-00-3	Chloroethane	ND		25	24.5	98	24.6	98	0	62-144/20
67-66-3	Chloroform	0.75	J	25	26.7	104	26.2	102	2	80-124/15
95-49-8	o-Chlorotoluene	ND		25	27.4	110	27.0	108	1	81-127/15
106-43-4	p-Chlorotoluene	ND		25	28.5	114	27.9	112	2	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		125	ND	0*	ND	0*	nc	56-122/23
75-15-0	Carbon disulfide	ND		25	28.3	113	23.7	95	18	66-148/23
56-23-5	Carbon tetrachloride	ND		25	28.4	114	24.1	96	16	76-136/23
75-34-3	1,1-Dichloroethane	ND		25	26.6	106	26.0	104	2	81-122/15
75-35-4	1,1-Dichloroethylene	ND		25	30.5	122	30.3	121	1	78-137/18
563-58-6	1,1-Dichloropropene	ND		25	28.2	113	27.1	108	4	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	24.0	96	22.0	88	9	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	24.8	99	24.4	98	2	75-120/13
107-06-2	1,2-Dichloroethane	ND		25	25.8	103	25.9	104	0	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	25.4	102	25.7	103	1	76-124/14
142-28-9	1,3-Dichloropropane	ND		25	24.0	96	23.7	95	1	80-118/13
594-20-7	2,2-Dichloropropane	ND		25	24.7	99	24.0	96	3	74-139/17
124-48-1	Dibromochloromethane	ND		25	23.9	96	20.2	81	17	78-122/19
75-71-8	Dichlorodifluoromethane	ND		25	22.4	90	22.3	89	0	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND		25	25.9	104	25.5	102	2	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	23.3	93	20.5	82	13	75-118/23
541-73-1	m-Dichlorobenzene	ND		25	26.3	105	25.8	103	2	84-125/14
95-50-1	o-Dichlorobenzene	ND		25	26.5	106	25.7	103	3	82-124/14
106-46-7	p-Dichlorobenzene	ND		25	25.1	100	24.7	99	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	27.3	109	26.2	105	4	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6352-24MS	P17540.D	1	07/17/13	EG	n/a	n/a	VP669
FA6352-24MSD	P17541.D	1	07/18/13	EG	n/a	n/a	VP669
FA6352-24	P17531.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6468-1, FA6468-2

CAS No.	Compound	FA6352-24 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		25	24.9	100	21.9	88	13	80-120/22
100-41-4	Ethylbenzene	ND		25	25.8	103	24.8	99	4	81-121/14
591-78-6	2-Hexanone	ND		125	120	96	123	98	2	61-129/18
87-68-3	Hexachlorobutadiene	ND		25	24.1	96	25.5	102	6	75-142/19
110-54-3	Hexane	ND		25	26.1	104	23.9	96	9	69-132/20
98-82-8	Isopropylbenzene	ND		25	29.0	116	27.9	112	4	83-132/15
99-87-6	p-Isopropyltoluene	ND		25	27.2	109	26.5	106	3	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		125	124	99	129	103	4	66-122/16
74-83-9	Methyl bromide	ND		25	23.4	94	23.5	94	0	59-143/19
74-87-3	Methyl chloride	ND		25	22.2	89	22.5	90	1	50-159/19
74-95-3	Methylene bromide	ND		25	24.8	99	25.5	102	3	78-119/14
75-09-2	Methylene chloride	ND		25	26.9	108	26.4	106	2	69-135/16
78-93-3	Methyl ethyl ketone	ND		125	111	89	120	96	8	56-143/18
1634-04-4	Methyl Tert Butyl Ether	0.91	J	25	25.5	98	25.9	100	2	72-117/14
91-20-3	Naphthalene	ND		25	21.9	88	24.0	96	9	63-132/25
103-65-1	n-Propylbenzene	ND		25	28.9	116	28.5	114	1	82-133/15
100-42-5	Styrene	ND		25	24.4	98	23.1	92	5	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		25	26.0	104	23.1	92	12	77-122/19
71-55-6	1,1,1-Trichloroethane	ND		25	27.6	110	26.8	107	3	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	23.4	94	24.5	98	5	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		25	24.1	96	23.7	95	2	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	21.5	86	23.0	92	7	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		25	22.9	92	24.1	96	5	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		25	22.7	91	23.3	93	3	73-129/20
95-63-6	1,2,4-Trimethylbenzene	ND		25	25.4	102	24.1	96	5	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		25	25.3	101	24.0	96	5	79-120/19
127-18-4	Tetrachloroethylene	0.52	J	25	25.0	98	22.7	89	10	76-135/16
108-88-3	Toluene	ND		25	25.1	100	24.1	96	4	80-120/14
79-01-6	Trichloroethylene	ND		25	28.5	114	29.1	116	2	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	27.1	108	25.9	104	5	71-156/21
75-01-4	Vinyl chloride	ND		25	24.2	97	25.3	101	4	69-159/18
108-05-4	Vinyl Acetate	ND		125	119	95	119	95	0	43-154/14
	m,p-Xylene	ND		50	55.4	111	52.5	105	5	79-126/15
95-47-6	o-Xylene	ND		25	28.0	112	26.7	107	5	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6352-24MS	P17540.D	1	07/17/13	EG	n/a	n/a	VP669
FA6352-24MSD	P17541.D	1	07/18/13	EG	n/a	n/a	VP669
FA6352-24	P17531.D	1	07/17/13	EG	n/a	n/a	VP669

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6468-1, FA6468-2

CAS No.	Surrogate Recoveries	MS	MSD	FA6352-24	Limits
1868-53-7	Dibromofluoromethane	101%	101%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	101%	99%	79-125%
2037-26-5	Toluene-D8	99%	97%	99%	85-112%
460-00-4	4-Bromofluorobenzene	99%	102%	108%	83-118%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MB	X029495.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6468-1

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MB	X029495.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6468-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MB	X029495.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6468-1

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	43%	14-67%
4165-62-2	Phenol-d5	28%	10-50%
118-79-6	2,4,6-Tribromophenol	90%	33-118%
4165-60-0	Nitrobenzene-d5	75%	42-108%
321-60-8	2-Fluorobiphenyl	80%	40-106%
1718-51-0	Terphenyl-d14	91%	39-121%

Blank Spike Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-BS	X029494.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6468-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	19.5	20	10-69
95-57-8	2-Chlorophenol	50	36.0	72	52-98
59-50-7	4-Chloro-3-methyl phenol	50	35.6	71	54-103
120-83-2	2,4-Dichlorophenol	50	38.3	77	53-103
105-67-9	2,4-Dimethylphenol	50	30.7	61	43-90
51-28-5	2,4-Dinitrophenol	100	76.1	76	44-112
534-52-1	4,6-Dinitro-o-cresol	100	96.4	96	66-121
95-48-7	2-Methylphenol	50	30.5	61	43-90
	3&4-Methylphenol	100	60.3	60	36-88
88-75-5	2-Nitrophenol	50	35.2	70	53-102
100-02-7	4-Nitrophenol	100	36.1	36	18-62
87-86-5	Pentachlorophenol	100	89.3	89	61-115
108-95-2	Phenol	50	19.3	39	19-56
95-95-4	2,4,5-Trichlorophenol	50	43.9	88	62-109
88-06-2	2,4,6-Trichlorophenol	50	42.5	85	59-107
83-32-9	Acenaphthene	50	43.0	86	61-107
208-96-8	Acenaphthylene	50	42.1	84	60-104
62-53-3	Aniline	50	32.8	66	47-100
120-12-7	Anthracene	50	42.3	85	65-108
92-87-5	Benzidine	50	30.2	60	25-99
56-55-3	Benzo(a)anthracene	50	43.2	86	66-111
50-32-8	Benzo(a)pyrene	50	39.9	80	62-107
205-99-2	Benzo(b)fluoranthene	50	43.2	86	65-114
191-24-2	Benzo(g,h,i)perylene	50	42.4	85	66-116
207-08-9	Benzo(k)fluoranthene	50	43.8	88	65-114
101-55-3	4-Bromophenyl phenyl ether	50	47.4	95	65-109
85-68-7	Butyl benzyl phthalate	50	43.2	86	65-112
100-51-6	Benzyl Alcohol	50	31.1	62	46-94
91-58-7	2-Chloronaphthalene	50	42.7	85	57-103
106-47-8	4-Chloroaniline	50	34.2	68	49-105
86-74-8	Carbazole	50	38.1	76	59-113
218-01-9	Chrysene	50	44.7	89	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	36.6	73	51-102
111-44-4	bis(2-Chloroethyl)ether	50	37.6	75	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	39.5	79	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	45.3	91	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-BS	X029494.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6468-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	39.5	79	48-97
122-66-7	1,2-Diphenylhydrazine	50	44.6	89	61-110
541-73-1	1,3-Dichlorobenzene	50	39.2	78	45-95
106-46-7	1,4-Dichlorobenzene	50	40.1	80	45-98
121-14-2	2,4-Dinitrotoluene	50	41.3	83	61-110
606-20-2	2,6-Dinitrotoluene	50	41.5	83	63-108
91-94-1	3,3'-Dichlorobenzidine	50	39.7	79	46-117
53-70-3	Dibenzo(a,h)anthracene	50	41.1	82	66-119
132-64-9	Dibenzofuran	50	43.0	86	61-106
84-74-2	Di-n-butyl phthalate	50	38.4	77	65-107
117-84-0	Di-n-octyl phthalate	50	42.8	86	62-118
84-66-2	Diethyl phthalate	50	46.2	92	64-108
131-11-3	Dimethyl phthalate	50	43.6	87	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	41.9	84	61-117
206-44-0	Fluoranthene	50	37.4	75	63-106
86-73-7	Fluorene	50	45.2	90	62-108
118-74-1	Hexachlorobenzene	50	45.9	92	63-108
87-68-3	Hexachlorobutadiene	50	40.6	81	42-102
77-47-4	Hexachlorocyclopentadiene	50	35.4	71	39-102
67-72-1	Hexachloroethane	50	40.5	81	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	42.4	85	64-119
78-59-1	Isophorone	50	35.5	71	43-87
90-12-0	1-Methylnaphthalene	50	38.9	78	53-102
91-57-6	2-Methylnaphthalene	50	39.5	79	51-102
88-74-4	2-Nitroaniline	50	40.2	80	54-128
99-09-2	3-Nitroaniline	50	37.1	74	56-106
100-01-6	4-Nitroaniline	50	38.7	77	55-120
91-20-3	Naphthalene	50	37.0	74	47-100
98-95-3	Nitrobenzene	50	34.9	70	50-104
62-75-9	N-Nitrosodimethylamine	50	25.9	52	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	35.8	72	52-104
86-30-6	N-Nitrosodiphenylamine	50	42.3	85	64-108
85-01-8	Phenanthrene	50	43.7	87	66-110
129-00-0	Pyrene	50	44.3	89	64-113
110-86-1	Pyridine	50	18.6	37	23-74
120-82-1	1,2,4-Trichlorobenzene	50	37.9	76	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-BS	X029494.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6468-1

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	49%	14-67%
4165-62-2	Phenol-d5	32%	10-50%
118-79-6	2,4,6-Tribromophenol	92%	33-118%
4165-60-0	Nitrobenzene-d5	71%	42-108%
321-60-8	2-Fluorobiphenyl	85%	40-106%
1718-51-0	Terphenyl-d14	92%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MS	X029505.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
OP47835-MSD	X029506.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
FA6461-5	X029504.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6468-1

CAS No.	Compound	FA6461-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		200	81.4	41	83.7	42	3	10-69/39
95-57-8	2-Chlorophenol	ND		100	80.6	81	69.1	69	15	52-98/25
59-50-7	4-Chloro-3-methyl phenol	ND		100	82.0	82	72.6	73	12	54-103/23
120-83-2	2,4-Dichlorophenol	ND		100	85.4	85	74.3	74	14	53-103/26
105-67-9	2,4-Dimethylphenol	ND		100	71.1	71	61.8	62	14	43-90/27
51-28-5	2,4-Dinitrophenol	ND		200	176	88	155	78	13	44-112/25
534-52-1	4,6-Dinitro-o-cresol	ND		200	217	109	186	93	15	66-121/23
95-48-7	2-Methylphenol	ND		100	72.8	73	66.1	66	10	43-90/28
	3&4-Methylphenol	ND		200	148	74	134	67	10	36-88/28
88-75-5	2-Nitrophenol	ND		100	78.4	78	67.0	67	16	53-102/29
100-02-7	4-Nitrophenol	ND		200	112	56	109	55	3	18-62/33
87-86-5	Pentachlorophenol	ND		200	200	100	178	89	12	61-115/26
108-95-2	Phenol	ND		100	52.7	53	51.3	51	3	19-56/35
95-95-4	2,4,5-Trichlorophenol	ND		100	96.1	96	82.8	83	15	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		100	93.1	93	80.1	80	15	59-107/23
83-32-9	Acenaphthene	ND		100	94.3	94	80.7	81	16	61-107/22
208-96-8	Acenaphthylene	ND		100	93.4	93	79.8	80	16	60-104/22
62-53-3	Aniline	ND		100	70.3	70	63.7	64	10	47-100/30
120-12-7	Anthracene	ND		100	91.8	92	80.7	81	13	65-108/20
92-87-5	Benzidine	ND		100	17.1	17*	25.7	26	40*	25-99/31
56-55-3	Benzo(a)anthracene	ND		100	95.5	96	81.9	82	15	66-111/22
50-32-8	Benzo(a)pyrene	ND		100	90.0	90	76.3	76	16	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		100	97.3	97	83.4	83	15	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		100	96.7	97	83.4	83	15	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		100	97.4	97	84.3	84	14	65-114/24
101-55-3	4-Bromophenyl phenyl ether	ND		100	100	100	87.7	88	13	65-109/23
85-68-7	Butyl benzyl phthalate	ND		100	94.2	94	82.0	82	14	65-112/24
100-51-6	Benzyl Alcohol	ND		100	73.7	74	66.2	66	11	46-94/27
91-58-7	2-Chloronaphthalene	ND		100	93.0	93	80.1	80	15	57-103/23
106-47-8	4-Chloroaniline	ND		100	65.4	65	60.1	60	8	49-105/27
86-74-8	Carbazole	ND		100	84.3	84	75.0	75	12	59-113/21
218-01-9	Chrysene	ND		100	98.3	98	84.5	85	15	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	ND		100	80.8	81	69.4	69	15	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		100	82.5	83	69.1	69	18	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	87.6	88	75.8	76	14	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	100	100	87.1	87	14	62-105/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MS	X029505.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
OP47835-MSD	X029506.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
FA6461-5	X029504.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6468-1

CAS No.	Compound	FA6461-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		100	88.9	89	75.8	76	16	48-97/24
122-66-7	1,2-Diphenylhydrazine	ND		100	93.8	94	82.5	83	13	61-110/24
541-73-1	1,3-Dichlorobenzene	ND		100	89.3	89	75.2	75	17	45-95/25
106-46-7	1,4-Dichlorobenzene	ND		100	89.3	89	76.5	77	15	45-98/25
121-14-2	2,4-Dinitrotoluene	ND		100	93.1	93	80.7	81	14	61-110/21
606-20-2	2,6-Dinitrotoluene	ND		100	91.9	92	79.1	79	15	63-108/21
91-94-1	3,3'-Dichlorobenzidine	ND		100	74.6	75	70.0	70	6	46-117/29
53-70-3	Dibenzo(a,h)anthracene	ND		100	93.5	94	78.5	79	17	66-119/24
132-64-9	Dibenzofuran	ND		100	94.1	94	81.8	82	14	61-106/21
84-74-2	Di-n-butyl phthalate	ND		100	84.0	84	73.3	73	14	65-107/21
117-84-0	Di-n-octyl phthalate	ND		100	93.6	94	79.2	79	17	62-118/24
84-66-2	Diethyl phthalate	ND		100	103	103	88.9	89	15	64-108/21
131-11-3	Dimethyl phthalate	ND		100	96.2	96	84.6	85	13	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	90.7	91	79.5	80	13	61-117/23
206-44-0	Fluoranthene	ND		100	83.4	83	72.6	73	14	63-106/21
86-73-7	Fluorene	ND		100	99.7	100	85.4	85	15	62-108/20
118-74-1	Hexachlorobenzene	ND		100	97.0	97	86.2	86	12	63-108/22
87-68-3	Hexachlorobutadiene	ND		100	88.8	89	77.3	77	14	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND		100	76.7	77	64.9	65	17	39-102/29
67-72-1	Hexachloroethane	ND		100	90.6	91	78.2	78	15	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	95.6	96	82.6	83	15	64-119/24
78-59-1	Isophorone	ND		100	78.7	79	68.8	69	13	43-87/25
90-12-0	1-Methylnaphthalene	ND		100	86.0	86	75.3	75	13	53-102/27
91-57-6	2-Methylnaphthalene	ND		100	87.8	88	76.7	77	13	51-102/26
88-74-4	2-Nitroaniline	ND		100	89.1	89	77.2	77	14	54-128/24
99-09-2	3-Nitroaniline	ND		100	73.0	73	67.5	68	8	56-106/27
100-01-6	4-Nitroaniline	ND		100	91.1	91	80.9	81	12	55-120/24
91-20-3	Naphthalene	ND		100	81.3	81	71.5	72	13	47-100/29
98-95-3	Nitrobenzene	ND		100	77.4	77	67.1	67	14	50-104/28
62-75-9	N-Nitrosodimethylamine	ND		100	69.0	69	65.0	65	6	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	ND		100	80.0	80	68.8	69	15	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND		100	90.0	90	79.2	79	13	64-108/23
85-01-8	Phenanthrene	ND		100	94.6	95	82.7	83	13	66-110/21
129-00-0	Pyrene	ND		100	94.4	94	82.8	83	13	64-113/23
110-86-1	Pyridine	ND		100	45.7	46	43.9	44	4	23-74/34
120-82-1	1,2,4-Trichlorobenzene	ND		100	84.7	85	73.6	74	14	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47835-MS	X029505.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
OP47835-MSD	X029506.D	1	07/19/13	FS	07/18/13	OP47835	SX1408
FA6461-5	X029504.D	1	07/19/13	FS	07/18/13	OP47835	SX1408

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6468-1

CAS No.	Surrogate Recoveries	MS	MSD	FA6461-5	Limits
367-12-4	2-Fluorophenol	61%	57%	34%	14-67%
4165-62-2	Phenol-d5	45%	44%	24%	10-50%
118-79-6	2,4,6-Tribromophenol	96%	84%	71%	33-118%
4165-60-0	Nitrobenzene-d5	74%	64%	57%	42-108%
321-60-8	2-Fluorobiphenyl	89%	76%	61%	40-106%
1718-51-0	Terphenyl-d14	90%	82%	68%	39-121%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5020-MB	CD123054.D	1	07/19/13	CP	n/a	n/a	GCD5020

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6468-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	91%	70-131%
98-08-8	aaa-Trifluorotoluene	80%	69-143%

Blank Spike Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5020-BS	CD123053.D	1	07/19/13	CP	n/a	n/a	GCD5020

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6468-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.378	95	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	105%	70-131%
98-08-8	aaa-Trifluorotoluene	107%	69-143%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6507-1MS	CD123061.D	1	07/19/13	CP	n/a	n/a	GCD5020
FA6507-1MSD	CD123062.D	1	07/19/13	CP	n/a	n/a	GCD5020
FA6507-1	CD123055.D	1	07/19/13	CP	n/a	n/a	GCD5020

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6468-1

CAS No.	Compound	FA6507-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.0633	J	0.4	0.433	92	0.431	92	0	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA6507-1	Limits
460-00-4	4-Bromofluorobenzene	107%	105%	101%	70-131%
98-08-8	aaa-Trifluorotoluene	108%	108%	90%	69-143%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-MB	LL49491.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6468-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	90%	50-131%

Blank Spike Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-BS	LL49490.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6468-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.843	84	56-123
	TPH (> C22-C36)	1	0.883	88	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	110%	50-131%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6468
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-MS	LL49516.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870
OP47901-MSD	LL49517.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870
FA6510-3	LL49515.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6468-1

CAS No.	Compound	FA6510-3 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	6.62		1.92	8.13	79	7.32	36* [a]	10	56-123/33
	TPH (> C22-C36)	ND		1.92	1.75	91	1.63	85	7	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA6510-3	Limits
84-15-1	o-Terphenyl	108%	96%	95%	50-131%

(a) Outside control limits due to high level in sample relative to spike amount.

9.3.1

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA6468
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:					07/24/13		07/24/13		07/24/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Aluminum	200	15	15						
Antimony	6.0	1.3	1.3						
Arsenic	10	1.6	2.5						
Barium	200	1	1						
Beryllium	4.0	.5	.5						
Cadmium	5.0	.5	.5						
Calcium	1000	50	50						
Chromium	10	1.8	2						
Cobalt	50	.5	.5						
Copper	25	1	1						
Iron	300	29	29	-9.3	<300				
Lead	5.0	1.1	1.1						
Magnesium	5000	74	74						
Manganese	15	.7	.7	-0.10	<15	-0.10	<15	-0.20	<15
Molybdenum	50	.6	1						
Nickel	40	.5	.5						
Potassium	10000	200	200						
Selenium	10	2	2						
Silver	10	.5	.5						
Sodium	10000	500	500						
Strontium	10	.5	.5						
Thallium	10	1.3	1.3						
Tin	50	.7	1.8						
Titanium	10	.9	1						
Vanadium	50	.5	1						
Zinc	20	3	5						

Associated samples MP25542: FA6468-1, FA6468-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA6468
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			07/24/13					07/24/13	
Metal	FA6464-1 Original	DUP	RPD	QC Limits	FA6464-1 Original	MS	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron	367	358	2.5	0-20	367	23500	26000	89.0	70-130
Lead									
Magnesium									
Manganese	553	543	1.8	0-20	553	998	500	89.0	70-130
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP25542: FA6468-1, FA6468-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA6468
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	FA6464-1 Original	MSD	Spikelot MPFLICP1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	367	23200	26000	87.8	1.3	20
Lead						
Magnesium						
Manganese	553	981	500	85.6	1.7	20
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP25542: FA6468-1, FA6468-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA6468
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	BSP Result	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	25600	26000	98.5	85-115
Lead				
Magnesium				
Manganese	501	500	100.2	85-115
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP25542: FA6468-1, FA6468-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA6468
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	FA6464-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	367	332	9.6	0-10
Lead				
Magnesium				
Manganese	553	575	3.9	0-10
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP25542: FA6468-1, FA6468-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA6468
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	Sample ml	Final ml	FA6464-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10	366.6	359.268	3087	0.2	150	3000	90.9	85-115
Lead										
Magnesium										
Manganese	9.8	10	553.3	542.234	583.5	0.2	2.5	50	82.5*(a)	85-115
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP25542: FA6468-1, FA6468-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6468
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP22091/GN56890	2.0	0.0	mg/l	198	184	93.1	85-115%
Chemical Oxygen Demand	GP22147/GN56909	20	0.0	mg/l	50.0	50.9	102.0	87-122%
Chloride	GP22107/GN56829	2.0	0.0	mg/l	50	50.9	101.8	90-110%
Iron, Ferrous	GN56801	0.10	0.0	mg/l	.500	0.52	103.9	82-115%
Nitrogen, Ammonia	GP22191/GN57052	0.10	0.0	mg/l	2.5	2.61	104.4	90-110%
Nitrogen, Nitrate	GP22107/GN56829	0.10	0.0	mg/l	2.5	2.54	101.6	90-110%
Nitrogen, Nitrite	GP22107/GN56829	0.10	0.0	mg/l	2.5	2.64	105.6	90-110%
Nitrogen, Total Kjeldahl	GP22096/GN56874	0.53	0.0	mg/l	2.63	2.72	103.6	90-110%
Solids, Total Dissolved	GN56888	100	0.0	mg/l				
Sulfate	GP22107/GN56829	2.0	0.0	mg/l	50	49.7	99.4	90-110%

Associated Samples:
Batch GN56801: FA6468-1
Batch GN56832: FA6468-1
Batch GN56888: FA6468-1
Batch GP22091: FA6468-1
Batch GP22096: FA6468-1
Batch GP22107: FA6468-1
Batch GP22147: FA6468-1
Batch GP22191: FA6468-1
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6468
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP22091/GN56890	FA6468-1	mg/l	2.0 U	2.3	28.9	0-30%
Iron, Ferrous	GN56801	FA6437-21	mg/l	0.10	0.12	17.4	0-31%
Solids, Total Dissolved	GN56888	FA6570-1	mg/l	4670	4670	0.0	0-5%

Associated Samples:
Batch GN56801: FA6468-1
Batch GN56888: FA6468-1
Batch GP22091: FA6468-1
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6468
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP22147/GN56909	FA6573-1	mg/l	0.0	50.0	55.8	107.0	87-122%
Chloride	GP22107/GN56829	FA6471-5	mg/l	1580	50	1600	40.0(a)	90-110%
Nitrogen, Ammonia	GP22191/GN57052	FA6713-1	mg/l	0.030 U	2.5	2.5	100.0	90-110%
Nitrogen, Nitrate	GP22107/GN56829	FA6471-5	mg/l	5.0 U	2.5	6.1	244.0N(b)	90-110%
Nitrogen, Nitrite	GP22107/GN56829	FA6471-5	mg/l	5.0 U	2.5	5.5	220.0N(b)	90-110%
Nitrogen, Total Kjeldahl	GP22096/GN56874	FA6420-10	mg/l	2.8	2.63	5.1	87.6N(b)	90-110%
Sulfate	GP22107/GN56829	FA6471-5	mg/l	4540	50	4470	-140.0(a)	90-110%

Associated Samples:
Batch GN56832: FA6468-1
Batch GP22096: FA6468-1
Batch GP22107: FA6468-1
Batch GP22147: FA6468-1
Batch GP22191: FA6468-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6468
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chemical Oxygen Demand	GP22147/GN56909	FA6573-1	mg/l	0.0	50.0	55.8	0.0	26%
Chloride	GP22107/GN56829	FA6471-5	mg/l	1580	50	1600	0.0	20%
Nitrogen, Ammonia	GP22191/GN57052	FA6713-1	mg/l	0.030 U	2.5	2.6	3.9	20%
Nitrogen, Nitrate	GP22107/GN56829	FA6471-5	mg/l	5.0 U	2.5	6.3	3.2	20%
Nitrogen, Nitrite	GP22107/GN56829	FA6471-5	mg/l	5.0 U	2.5	5.6	1.8	20%
Nitrogen, Total Kjeldahl	GP22096/GN56874	FA6420-10	mg/l	2.8	2.63	5.3	3.8	20%
Sulfate	GP22107/GN56829	FA6471-5	mg/l	4540	50	4480	0.2	20%

Associated Samples:
Batch GN56832: FA6468-1
Batch GP22096: FA6468-1
Batch GP22107: FA6468-1
Batch GP22147: FA6468-1
Batch GP22191: FA6468-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Southeast ACCUTEST LABORATORIES

08/13/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA6510

Sampling Dates: 07/16/13 - 07/17/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **131**

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Harry Behzadi, Ph.D.
Laboratory Director

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Accutest LabLink@144198 10:34 13-Aug-2013

Sample Summary

Bhate Environmental

Job No: FA6510

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA6510-1	07/16/13	15:00	DMZB	07/18/13	AQ	Ground Water	SS61-MW29
FA6510-1F	07/16/13	15:00	DMZB	07/18/13	AQ	Ground Water	SS61-MW29
FA6510-2	07/16/13	00:00	DMZB	07/18/13	AQ	Trip Blank Water	TRIP BLANK
FA6510-3	07/16/13	15:10	DMZB	07/18/13	AQ	Ground Water	SS61-MW28
FA6510-3F	07/16/13	15:10	DMZB	07/18/13	AQ	Ground Water	SS61-MW28
FA6510-4	07/16/13	00:00	DMZB	07/18/13	AQ	Trip Blank Water	TRIP BLANK
FA6510-5	07/17/13	09:00	DMZB	07/18/13	AQ	Ground Water	SS61-MW27
FA6510-5F	07/17/13	09:00	DMZB	07/18/13	AQ	Ground Water	SS61-MW27
FA6510-6	07/17/13	00:00	DMZB	07/18/13	AQ	Trip Blank Water	TRIP BLANK
FA6510-7	07/17/13	09:15	DMZB	07/18/13	AQ	Ground Water	SS61-MW26
FA6510-7F	07/17/13	09:15	DMZB	07/18/13	AQ	Ground Water	SS61-MW26
FA6510-8	07/17/13	00:00	DMZB	07/18/13	AQ	Trip Blank Water	TRIP BLANK
FA6510-9	07/17/13	10:50	DMZB	07/18/13	AQ	Ground Water	SS61-MW24

Sample Summary
(continued)

Bhate Environmental

Job No: FA6510

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA6510-9F	07/17/13	10:50	DMZB	07/18/13	AQ	Ground Water	SS61-MW24
FA6510-10	07/17/13	00:00	DMZB	07/18/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA6510

Site: Holloman AFB; SS61 VCM **Report Date** 8/1/2013 9:02:08 AM

5 Samples and 5 Trip Blanks were collected between 07/16/2013 and 07/17/2013 and were received at Accutest SE on 07/18/2013 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA6510. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VB3761

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6550-5MS, FA6550-5MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acrolein are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, Acrolein are outside control limits. Probable cause is due to matrix interference.

FA6510-1 for Acrolein: Associated BS recovery outside control limits.

FA6510-2 for Acrolein: Associated BS recovery outside control limits.

FA6510-3 for Acrolein: Associated BS recovery outside control limits.

FA6510-4 for Acrolein: Associated BS recovery outside control limits.

FA6510-5 for Acrolein: Associated BS recovery outside control limits.

FA6510-6 for Acrolein: Associated BS recovery outside control limits.

FA6510-8 for Acrolein: Associated BS recovery outside control limits.

FA6510-10 for Acrolein: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VB3762

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6576-3MS, FA6576-3MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acrolein are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, Acrolein are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for 2-Chloroethyl vinyl ether are outside control limits for sample FA6576-3MSD. Probable cause is due to sample non-homogeneity.

FA6510-9 for Acrolein: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VI118

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6536-1MS, FA6536-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Benzene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP47894

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6619-6MS, FA6619-6MSD were used as the QC samples indicated.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for Benzidine are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD5020

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6507-1MS, FA6507-1MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** GCD5021

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6638-1MS, FA6638-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP47901

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6510-3MS, FA6510-3MSD were used as the QC samples indicated.

Metals By Method SW846 6010C

Matrix: AQ **Batch ID:** MP25543

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6510-1DUP, FA6510-1MS, FA6510-1MSD, FA6510-1PS, FA6510-1SDL were used as the QC samples for metals.

Matrix: AQ **Batch ID:** MP25547

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6646-6DUP, FA6646-6MS, FA6646-6MSD, FA6646-6PS, FA6646-6SDL were used as the QC samples for metals.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP22111

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6472-4MS, FA6472-4MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA6510-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA6510-3 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP22112

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6508-4MS, FA6508-4MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

Matrix Spike Recovery(s) for Sulfate are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

FA6510-5 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA6510-7 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA6510-9 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP22191

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6713-1MS, FA6713-1MSD were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP22158

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6510-1MS, FA6510-1MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN56825

All method blanks for this batch meet method specific criteria.

Sample(s) FA6510-9DUP was used as the QC samples for Iron, Ferrous.

FA6510-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA6510-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA6510-5 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA6510-7 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA6510-9 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R31467

FA6510-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R31468

FA6510-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R31469

FA6510-5 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R31470

FA6510-7 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R31471

FA6510-9 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN56888

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6570-1DUP was used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP22103

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6510-1DUP was used as the QC samples for BOD, 5 Day.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP22147

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6573-1MS, FA6573-1MSD were used as the QC samples for Chemical Oxygen Demand.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: August 1, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA6510
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/16/13 thru 07/17/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA6510-1	**SS61-MW29**					
tert-Butylbenzene		0.93 J	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		0.41 J	1.0	0.22	ug/l	SW846 8260B
Isopropylbenzene		2.5	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.0902 J	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		0.653	0.24	0.096	mg/l	SW846 8015C
Chemical Oxygen Demand		46.1	20	5.3	mg/l	SM19 5220C
Nitrogen, Ammonia		0.042 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		2.4	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		11900	1000	100	mg/l	SM19 2540C
Sulfate		5500	200	60	mg/l	EPA 300/SW846 9056A
FA6510-2	**TRIP BLANK**					
No hits reported in this sample.						
FA6510-3	**SS61-MW28**					
sec-Butylbenzene		1.2	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		2.8	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		0.79 J	1.0	0.22	ug/l	SW846 8260B
Isopropylbenzene		68.7	1.0	0.20	ug/l	SW846 8260B
n-Propylbenzene		0.87 J	1.0	0.23	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.191	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		6.62	1.2	0.48	mg/l	SW846 8015C
BOD, 5 Day		11.0	7.0	7.0	mg/l	SM19 5210B
Chemical Oxygen Demand		55.8	20	5.3	mg/l	SM19 5220C
Nitrogen, Total Kjeldahl		1.0	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		8640	1000	100	mg/l	SM19 2540C
Sulfate		4950	200	60	mg/l	EPA 300/SW846 9056A
FA6510-4	**TRIP BLANK**					
Toluene		0.41 J	1.0	0.20	ug/l	SW846 8260B
FA6510-5	**SS61-MW27**					
tert-Butylbenzene		13.4	1.0	0.29	ug/l	SW846 8260B
m-Dichlorobenzene		0.38 J	1.0	0.25	ug/l	SW846 8260B
o-Dichlorobenzene		0.79 J	1.0	0.22	ug/l	SW846 8260B
p-Dichlorobenzene		0.38 J	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene		0.24 J	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.675	0.20	0.10	mg/l	SW846 8015C
TPH (C10-C22)		0.173 J	0.24	0.096	mg/l	SW846 8015C

Summary of Hits

Job Number: FA6510
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/16/13 thru 07/17/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Chemical Oxygen Demand		50.9	20	5.3	mg/l	SM19 5220C
Nitrogen, Total Kjeldahl		1.8	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		6040	500	50	mg/l	SM19 2540C
Sulfate		3240	100	30	mg/l	EPA 300/SW846 9056A
FA6510-6	**TRIP BLANK**					
No hits reported in this sample.						
FA6510-7	**SS61-MW26**					
Benzene		442	20	4.2	ug/l	SW846 8260B
sec-Butylbenzene		1.3	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		1.9	1.0	0.29	ug/l	SW846 8260B
Carbon disulfide		1.6 J	2.0	0.49	ug/l	SW846 8260B
Ethylbenzene		95.5	20	5.8	ug/l	SW846 8260B
Isopropylbenzene		258	20	4.0	ug/l	SW846 8260B
n-Propylbenzene		8.0	1.0	0.23	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		39.2	2.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		5.3	2.0	0.20	ug/l	SW846 8260B
Toluene		44.2	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene		120	40	5.9	ug/l	SW846 8260B
o-Xylene		96.7	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		1.97	0.50	0.25	mg/l	SW846 8015C
TPH (C10-C22)		0.220 J	0.24	0.097	mg/l	SW846 8015C
Chemical Oxygen Demand		12.1 J	20	5.3	mg/l	SM19 5220C
Nitrogen, Total Kjeldahl		1.5	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		4300	500	50	mg/l	SM19 2540C
Sulfate		1500	100	30	mg/l	EPA 300/SW846 9056A
FA6510-8	**TRIP BLANK**					
Isopropylbenzene		0.28 J	1.0	0.20	ug/l	SW846 8260B
FA6510-9	**SS61-MW24**					
Benzene		3.1	2.0	0.42	ug/l	SW846 8260B
sec-Butylbenzene		2.7	2.0	0.42	ug/l	SW846 8260B
tert-Butylbenzene		2.9	2.0	0.59	ug/l	SW846 8260B
o-Dichlorobenzene		0.62 J	2.0	0.43	ug/l	SW846 8260B
Ethylbenzene		198	25	7.3	ug/l	SW846 8260B
Isopropylbenzene		427	25	5.0	ug/l	SW846 8260B
p-Isopropyltoluene		0.54 J	2.0	0.40	ug/l	SW846 8260B
Methylene chloride		4.6 J	10	4.0	ug/l	SW846 8260B
Naphthalene		2.5 J	10	2.0	ug/l	SW846 8260B

Summary of Hits

Job Number: FA6510
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/16/13 thru 07/17/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
n-Propylbenzene		17.2	2.0	0.45	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		104	4.0	0.40	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		4.2	4.0	0.40	ug/l	SW846 8260B
Toluene		4.3	2.0	0.40	ug/l	SW846 8260B
m,p-Xylene		150	4.0	0.59	ug/l	SW846 8260B
o-Xylene		50.9	2.0	0.40	ug/l	SW846 8260B
Naphthalene		0.70 J	4.8	0.61	ug/l	SW846 8270D
TPH-GRO (C6-C10)		2.01	1.0	0.50	mg/l	SW846 8015C
TPH (C10-C22)		3.76	0.97	0.39	mg/l	SW846 8015C
BOD, 5 Day		8.3	4.0	4.0	mg/l	SM19 5210B
Chemical Oxygen Demand		38.8	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		0.71 J	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Nitrogen, Ammonia		0.042 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		1.5	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5200	500	50	mg/l	SM19 2540C
Sulfate		3660	100	30	mg/l	EPA 300/SW846 9056A

FA6510-10 TRIP BLANK

No hits reported in this sample.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091904.D	1	07/19/13	WV	n/a	n/a	VB3761
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.93	1.0	0.29	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.41	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	2.5	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		83-118%
17060-07-0	1,2-Dichloroethane-D4	92%		79-125%
2037-26-5	Toluene-D8	91%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X029580.D	1	07/24/13	FS	07/23/13	OP47894	SX1411
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	49	9.7	ug/l	
95-57-8	2-Chlorophenol	ND	4.9	0.69	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.9	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.9	0.68	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.9	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.9	0.70	ug/l	
	3&4-Methylphenol	ND	4.9	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.9	0.66	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.9	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.9	ug/l	
108-95-2	Phenol	ND	4.9	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.9	0.87	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.9	0.76	ug/l	
83-32-9	Acenaphthene	ND	4.9	0.68	ug/l	
208-96-8	Acenaphthylene	ND	4.9	0.67	ug/l	
62-53-3	Aniline	ND	4.9	0.76	ug/l	
120-12-7	Anthracene	ND	4.9	0.73	ug/l	
92-87-5	Benzidine	ND	24	4.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	0.53	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	0.65	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.9	0.77	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.9	0.69	ug/l	
100-51-6	Benzyl Alcohol	ND	4.9	0.97	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.9	0.71	ug/l	
106-47-8	4-Chloroaniline	ND	4.9	0.67	ug/l	
86-74-8	Carbazole	ND	4.9	0.51	ug/l	
218-01-9	Chrysene	ND	4.9	0.57	ug/l	

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RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.9	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.9	0.70	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.9	0.77	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.9	0.85	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.9	0.66	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.9	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.9	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.9	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.9	0.67	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.9	0.78	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.9	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	0.57	ug/l	
132-64-9	Dibenzofuran	ND	4.9	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.9	0.97	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.9	0.97	ug/l	
84-66-2	Diethyl phthalate	ND	4.9	0.97	ug/l	
131-11-3	Dimethyl phthalate	ND	4.9	0.78	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.9	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.9	0.57	ug/l	
86-73-7	Fluorene	ND	4.9	0.74	ug/l	
118-74-1	Hexachlorobenzene	ND	4.9	0.67	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.9	0.93	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.9	0.77	ug/l	
67-72-1	Hexachloroethane	ND	4.9	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	0.56	ug/l	
78-59-1	Isophorone	ND	4.9	0.62	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	0.67	ug/l	
88-74-4	2-Nitroaniline	ND	4.9	0.73	ug/l	
99-09-2	3-Nitroaniline	ND	4.9	0.63	ug/l	
100-01-6	4-Nitroaniline	ND	4.9	0.94	ug/l	
91-20-3	Naphthalene	ND	4.9	0.62	ug/l	
98-95-3	Nitrobenzene	ND	4.9	0.70	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.9	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.9	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.9	0.97	ug/l	
85-01-8	Phenanthrene	ND	4.9	0.68	ug/l	
129-00-0	Pyrene	ND	4.9	0.66	ug/l	
110-86-1	Pyridine	ND	9.7	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.59	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		14-67%
4165-62-2	Phenol-d5	35%		10-50%
118-79-6	2,4,6-Tribromophenol	81%		33-118%
4165-60-0	Nitrobenzene-d5	70%		42-108%
321-60-8	2-Fluorobiphenyl	71%		40-106%
1718-51-0	Terphenyl-d14	85%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123065.D	1	07/19/13	CP	n/a	n/a	GCD5020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.0902	0.10	0.050	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		70-131%
98-08-8	aaa-Trifluorotoluene	96%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49492.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.653	0.24	0.096	mg/l	
	TPH (> C22-C36)	ND	0.24	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	4.0 U	4.0	4.0	mg/l	2	07/18/13 11:45	HH	SM19 5210B
Chemical Oxygen Demand	46.1	20	5.3	mg/l	1	07/23/13 10:40	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	07/18/13 14:50	LE	SM18 4500/EPA 376.1
Nitrogen, Ammonia	0.042 J	0.10	0.030	mg/l	1	07/30/13 12:25	VK	EPA 350.1
Nitrogen, Nitrate [a]	5.0 U	10	5.0	mg/l	100	07/18/13 14:06	AC	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	2.4	0.53	0.17	mg/l	1	07/25/13 12:28	MG	EPA 351.2
Solids, Total Dissolved	11900	1000	100	mg/l	10	07/22/13 13:35	KC	SM19 2540C
Sulfate	5500	200	60	mg/l	100	07/18/13 14:06	AC	EPA 300/SW846 9056A

(a) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-2	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091905.D	1	07/19/13	WV	n/a	n/a	VB3761
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-2	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-2	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		83-118%
17060-07-0	1,2-Dichloroethane-D4	91%		79-125%
2037-26-5	Toluene-D8	90%		85-112%
460-00-4	4-Bromofluorobenzene	94%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091906.D	1	07/19/13	WV	n/a	n/a	VB3761
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	1.2	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	2.8	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.79	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	68.7	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.87	1.0	0.23	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		83-118%
17060-07-0	1,2-Dichloroethane-D4	93%		79-125%
2037-26-5	Toluene-D8	88%		85-112%
460-00-4	4-Bromofluorobenzene	94%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X029569.D	1	07/23/13	FS	07/23/13	OP47894	SX1411
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		14-67%
4165-62-2	Phenol-d5	39%		10-50%
118-79-6	2,4,6-Tribromophenol	92%		33-118%
4165-60-0	Nitrobenzene-d5	79%		42-108%
321-60-8	2-Fluorobiphenyl	83%		40-106%
1718-51-0	Terphenyl-d14	89%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123066.D	1	07/19/13	CP	n/a	n/a	GCD5020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.191	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		70-131%
98-08-8	aaa-Trifluorotoluene	78%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49515.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	6.62	1.2	0.48	mg/l	
	TPH (> C22-C36)	ND	1.2	0.48	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	11.0	7.0	7.0	mg/l	3	07/18/13 11:45	HH	SM19 5210B
Chemical Oxygen Demand	55.8	20	5.3	mg/l	1	07/23/13 10:40	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	07/18/13 14:50	LE	SM18 4500/EPA 376.1
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	07/30/13 12:26	VK	EPA 350.1
Nitrogen, Nitrate [a]	5.0 U	10	5.0	mg/l	100	07/18/13 14:22	AC	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.0	0.53	0.17	mg/l	1	07/25/13 12:33	MG	EPA 351.2
Solids, Total Dissolved	8640	1000	100	mg/l	10	07/22/13 13:35	KC	SM19 2540C
Sulfate	4950	200	60	mg/l	100	07/18/13 14:22	AC	EPA 300/SW846 9056A

(a) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-4	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091907.D	1	07/19/13	WV	n/a	n/a	VB3761
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-4	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.41	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-4	**Date Sampled:**	07/16/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		83-118%
17060-07-0	1,2-Dichloroethane-D4	91%		79-125%
2037-26-5	Toluene-D8	93%		85-112%
460-00-4	4-Bromofluorobenzene	95%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091908.D	1	07/19/13	WV	n/a	n/a	VB3761
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	13.4	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.38	1.0	0.25	ug/l	J
95-50-1	o-Dichlorobenzene	0.79	1.0	0.22	ug/l	J
106-46-7	p-Dichlorobenzene	0.38	1.0	0.20	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	0.24	1.0	0.20	ug/l	J
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		83-118%
17060-07-0	1,2-Dichloroethane-D4	90%		79-125%
2037-26-5	Toluene-D8	92%		85-112%
460-00-4	4-Bromofluorobenzene	94%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X029570.D	1	07/23/13	FS	07/23/13	OP47894	SX1411
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%		14-67%
4165-62-2	Phenol-d5	38%		10-50%
118-79-6	2,4,6-Tribromophenol	87%		33-118%
4165-60-0	Nitrobenzene-d5	79%		42-108%
321-60-8	2-Fluorobiphenyl	81%		40-106%
1718-51-0	Terphenyl-d14	87%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123067.D	2	07/19/13	CP	n/a	n/a	GCD5020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.675	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		70-131%
98-08-8	aaa-Trifluorotoluene	115%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49520.D	1	07/31/13	SJL	07/23/13	OP47901	GLL1870
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.173	0.24	0.096	mg/l	J
	TPH (> C22-C36)	ND	0.24	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	4.0 U	4.0	4.0	mg/l	2	07/18/13 11:45	HH	SM19 5210B
Chemical Oxygen Demand	50.9	20	5.3	mg/l	1	07/23/13 10:40	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	07/18/13 14:50	LE	SM18 4500/EPA 376.1
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	07/30/13 12:27	VK	EPA 350.1
Nitrogen, Nitrate [a]	2.5 U	5.0	2.5	mg/l	50	07/18/13 19:08	AC	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.8	0.53	0.17	mg/l	1	07/25/13 12:37	MG	EPA 351.2
Solids, Total Dissolved	6040	500	50	mg/l	5	07/22/13 13:35	KC	SM19 2540C
Sulfate	3240	100	30	mg/l	50	07/18/13 19:08	AC	EPA 300/SW846 9056A

(a) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-6	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091910.D	1	07/19/13	WV	n/a	n/a	VB3761
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-6	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-6	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	93%		79-125%
2037-26-5	Toluene-D8	93%		85-112%
460-00-4	4-Bromofluorobenzene	93%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091911.D	1	07/19/13	WV	n/a	n/a	VB3761
Run #2	I13182.D	20	07/23/13	WV	n/a	n/a	VI118

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	442 [a]	20	4.2	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	1.3	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	1.9	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	1.6	2.0	0.49	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	95.5 [a]	20	5.8	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	258 [a]	20	4.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	8.0	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	39.2	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	5.3	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	44.2	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	120 [a]	40	5.9	ug/l	
95-47-6	o-Xylene	96.7	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	87%	106%	79-125%
2037-26-5	Toluene-D8	89%	99%	85-112%
460-00-4	4-Bromofluorobenzene	94%	112%	83-118%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X029571.D	1	07/23/13	FS	07/23/13	OP47894	SX1411
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		14-67%
4165-62-2	Phenol-d5	33%		10-50%
118-79-6	2,4,6-Tribromophenol	83%		33-118%
4165-60-0	Nitrobenzene-d5	72%		42-108%
321-60-8	2-Fluorobiphenyl	74%		40-106%
1718-51-0	Terphenyl-d14	87%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123088.D	5	07/22/13	CP	n/a	n/a	GCD5021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.97	0.50	0.25	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	117%		70-131%
98-08-8	aaa-Trifluorotoluene	98%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49497.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.220	0.24	0.097	mg/l	J
	TPH (> C22-C36)	ND	0.24	0.097	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	103%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	4.0 U	4.0	4.0	mg/l	2	07/18/13 11:45	HH	SM19 5210B
Chemical Oxygen Demand	12.1 J	20	5.3	mg/l	1	07/23/13 10:40	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	07/18/13 14:50	LE	SM18 4500/EPA 376.1
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	07/30/13 12:28	VK	EPA 350.1
Nitrogen, Nitrate [a]	2.5 U	5.0	2.5	mg/l	50	07/18/13 19:24	AC	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.5	0.53	0.17	mg/l	1	07/25/13 12:38	MG	EPA 351.2
Solids, Total Dissolved	4300	500	50	mg/l	5	07/22/13 13:35	KC	SM19 2540C
Sulfate	1500	100	30	mg/l	50	07/18/13 19:24	AC	EPA 300/SW846 9056A

(a) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-8	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091912.D	1	07/19/13	WV	n/a	n/a	VB3761
Run #2	B091933.D	1	07/22/13	WV	n/a	n/a	VB3762

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND [b]	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-8	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	0.28	1.0	0.20	ug/l	J
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-8	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%	90%	83-118%
17060-07-0	1,2-Dichloroethane-D4	93%	84%	79-125%
2037-26-5	Toluene-D8	91%	97%	85-112%
460-00-4	4-Bromofluorobenzene	94%	97%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091932.D	2	07/22/13	WV	n/a	n/a	VB3762
Run #2	B091913.D	25	07/19/13	WV	n/a	n/a	VB3761

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/l	
107-02-8	Acrolein [a]	ND	40	14	ug/l	
107-13-1	Acrylonitrile	ND	20	4.0	ug/l	
71-43-2	Benzene	3.1	2.0	0.42	ug/l	
108-86-1	Bromobenzene	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	2.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.40	ug/l	
75-25-2	Bromoform	ND	2.0	0.69	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.40	ug/l	
135-98-8	sec-Butylbenzene	2.7	2.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	2.9	2.0	0.59	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.40	ug/l	
75-00-3	Chloroethane	ND	4.0	1.0	ug/l	
67-66-3	Chloroform	ND	2.0	0.53	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.43	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.40	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	4.0	0.99	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.43	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.40	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.60	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.44	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.52	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.54	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.49	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	4.0	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.44	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	2.0	0.51	ug/l	
95-50-1	o-Dichlorobenzene	0.62	2.0	0.43	ug/l	J
106-46-7	p-Dichlorobenzene	ND	2.0	0.40	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.46	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.42	ug/l	
100-41-4	Ethylbenzene	198 [b]	25	7.3	ug/l	
591-78-6	2-Hexanone	ND	20	4.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.0	1.0	ug/l	
110-54-3	Hexane	ND	4.0	1.8	ug/l	
98-82-8	Isopropylbenzene	427 [b]	25	5.0	ug/l	
99-87-6	p-Isopropyltoluene	0.54	2.0	0.40	ug/l	J
108-10-1	4-Methyl-2-pentanone	ND	10	4.5	ug/l	
74-83-9	Methyl bromide	ND	4.0	1.6	ug/l	
74-87-3	Methyl chloride	ND	4.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	4.0	0.69	ug/l	
75-09-2	Methylene chloride	4.6	10	4.0	ug/l	J
78-93-3	Methyl ethyl ketone	ND	10	6.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.42	ug/l	
91-20-3	Naphthalene	2.5	10	2.0	ug/l	J
103-65-1	n-Propylbenzene	17.2	2.0	0.45	ug/l	
100-42-5	Styrene	ND	2.0	0.40	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.40	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.48	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	4.0	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	104	4.0	0.40	ug/l	
108-67-8	1,3,5-Trimethylbenzene	4.2	4.0	0.40	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.64	ug/l	
108-88-3	Toluene	4.3	2.0	0.40	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-69-4	Trichlorofluoromethane	ND	4.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.88	ug/l	
108-05-4	Vinyl Acetate	ND	20	6.3	ug/l	
	m,p-Xylene	150	4.0	0.59	ug/l	
95-47-6	o-Xylene	50.9	2.0	0.40	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%	93%	83-118%
17060-07-0	1,2-Dichloroethane-D4	84%	92%	79-125%
2037-26-5	Toluene-D8	95%	90%	85-112%
460-00-4	4-Bromofluorobenzene	91%	94%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X029572.D	1	07/23/13	FS	07/23/13	OP47894	SX1411
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	0.70	4.8	0.61	ug/l	J
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		14-67%
4165-62-2	Phenol-d5	35%		10-50%
118-79-6	2,4,6-Tribromophenol	88%		33-118%
4165-60-0	Nitrobenzene-d5	73%		42-108%
321-60-8	2-Fluorobiphenyl	82%		40-106%
1718-51-0	Terphenyl-d14	84%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123069.D	10	07/19/13	CP	n/a	n/a	GCD5020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	2.01	1.0	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		70-131%
98-08-8	aaa-Trifluorotoluene	87%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49521.D	4	07/31/13	SJL	07/23/13	OP47901	GLL1870
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.76	0.97	0.39	mg/l	
	TPH (> C22-C36)	ND	0.97	0.39	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	8.3	4.0	4.0	mg/l	2	07/18/13 11:45	HH	SM19 5210B
Chemical Oxygen Demand	38.8	20	5.3	mg/l	1	07/23/13 10:40	LE	SM19 5220C
Hydrogen Sulfide	0.71 J	1.0	0.50	mg/l	1	07/18/13 14:50	LE	SM18 4500/EPA 376.1
Nitrogen, Ammonia	0.042 J	0.10	0.030	mg/l	1	07/30/13 12:29	VK	EPA 350.1
Nitrogen, Nitrate [a]	2.5 U	5.0	2.5	mg/l	50	07/18/13 19:40	AC	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.5	0.53	0.17	mg/l	1	07/25/13 12:46	MG	EPA 351.2
Solids, Total Dissolved	5200	500	50	mg/l	5	07/22/13 13:35	KC	SM19 2540C
Sulfate	3660	100	30	mg/l	50	07/18/13 19:40	AC	EPA 300/SW846 9056A

(a) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-10	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091914.D	1	07/19/13	WV	n/a	n/a	VB3761
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-10	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6510-10	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/18/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	93%		79-125%
2037-26-5	Toluene-D8	93%		85-112%
460-00-4	4-Bromofluorobenzene	95%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

brate ENVIRONMENTAL CONSTRUCTION ENERGY
1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA6510

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07172013-01
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1	SS61-MW29	07/16/2013	1500	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				1
2	Trip Blank			-	TB	1	WQ	2	X													1
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

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

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	7/17/13	1500	1. [signature]		10:00
2. [signature]			2. [signature] (Alstec)	7-18-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7962 4765 1588
Analytical Lab: Accutest
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

28 30 36 34 40

FA6510: Chain of Custody
Page 1 of 7

brate ENVIRONMENTAL CONSTRUCTION ENERGY
1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA 6510

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07172013-02
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
3	SS61-MW28	07/16/2013	1510	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				2
4	Trip Blank			-	TB	1	WQ	2	X													2
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1. D. McNeil	7/17/13	1500	1. FX		10:00
2. FX			2. [illegible] (ALHE)	7-18-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7962 4765 1165
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA6510: Chain of Custody
Page 2 of 7

FA6510

bhate ENVIRONMENTAL CONSTRUCTION ENERGY
1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07172013-03
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
5	SS61-MW27	07/17/2013	0900	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				3
6	Trip Blank			-	TB	1	WQ	2	X													3
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	7/17/13	1500	1. EX		10:00
2. EX			2. [signature] (AISR)	7-18-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:		Shipped No.:	
Method of Shipment:	Fed Ex	Airbill Number:	7962 4765 1360
Analytical Lab:	Accutest	Delivery Location:	Orlando, FL
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA6510

bhate ENVIRONMENTAL CONSTRUCTION ENERGY
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Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07172013-04
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
7	SS61-MW26	07/17/2013	0915	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				4
8	Trip Blank			-	TB	1	WQ	2	X													4
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	7/17/13	1500	1. FX		10:00
2. FX			2. [signature] (ABS)	7-18-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: ____ Shipped No.: ____
Method of Shipment: Fed Ex Airbill Number: 7962 4765 1641
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

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FA6510

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07172013-05
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
9	SS61-MW24	07/17/2013	1050	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				5
10	Trip Blank			-	TB	1	WQ	2	X													5

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.	D.McN	7/17/13	1500	FX		
2.	FX			[illegible] (ALSK)	7.18.13	10:00
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7962 4765 1658
Analytical Lab: Accutest
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01 if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
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FA6510: Chain of Custody
Page 5 of 7

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 6510 CLIENT: BHATE PROJECT: SS-61

DATE/TIME RECEIVED: 7-18-13 10:00 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: 5

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7962 4765 1388

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [X] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [X] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [X] RECEIVED WATER TRIP BLANK 5
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.2 2.6 3.2 3.0 3.6
- [ ] CORRECTED TEMPS: 2.8 3.0 3.6 3.4 4.0

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE JC 7-18-13 REVIEWER SIGNATURE/DATE [signature] 07/18/13

NF 12/10

receipt confirmation 122910.xls

5.1

5

FA6510: Chain of Custody

Page 6 of 7

Job Change Order: FA6510_8/1/2013

Requested Date:	8/1/2013	**Received Date:**	7/18/2013
Account Name:	Bhate Environmental	**Due Date:**	8/1/2013
Project	Holloman AFB; SS61 VCM	**Deliverable:**	COMMBN
CSR:	JDS	**TAT (Days):**	3

Sample #:
FA6510-1,1F, 3, 3F,5, 5F,7, 7F, 9, 9F

Change: Please re-log and analyze metals Fe and Mn via 200.7.
Thank you.

Above Changes Per: Lab **Date:** 8/1/2013

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3761-MB	B091902.D	1	07/19/13	WV	n/a	n/a	VB3761

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-1, FA6510-2, FA6510-3, FA6510-4, FA6510-5, FA6510-6, FA6510-7, FA6510-8, FA6510-9, FA6510-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3761-MB	B091902.D	1	07/19/13	WV	n/a	n/a	VB3761

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-1, FA6510-2, FA6510-3, FA6510-4, FA6510-5, FA6510-6, FA6510-7, FA6510-8, FA6510-9, FA6510-10

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3761-MB	B091902.D	1	07/19/13	WV	n/a	n/a	VB3761

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-1, FA6510-2, FA6510-3, FA6510-4, FA6510-5, FA6510-6, FA6510-7, FA6510-8, FA6510-9, FA6510-10

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	93%	83-118%
17060-07-0	1,2-Dichloroethane-D4	93%	79-125%
2037-26-5	Toluene-D8	94%	85-112%
460-00-4	4-Bromofluorobenzene	97%	83-118%

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3762-MB	B091929.D	1	07/22/13	WV	n/a	n/a	VB3762

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-8, FA6510-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3762-MB	B091929.D	1	07/22/13	WV	n/a	n/a	VB3762

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-8, FA6510-9

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3762-MB	B091929.D	1	07/22/13	WV	n/a	n/a	VB3762

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-8, FA6510-9

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	88%	83-118%
17060-07-0	1,2-Dichloroethane-D4	87%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	96%	83-118%

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI118-MB	I13169.D	1	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-7

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	108%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	107%	83-118%

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3761-BS	B091901.D	1	07/19/13	WV	n/a	n/a	VB3761

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-1, FA6510-2, FA6510-3, FA6510-4, FA6510-5, FA6510-6, FA6510-7, FA6510-8, FA6510-9, FA6510-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	146	117	50-147
107-02-8	Acrolein	125	370	296*	31-154
107-13-1	Acrylonitrile	125	109	87	58-126
71-43-2	Benzene	25	27.3	109	81-122
108-86-1	Bromobenzene	25	25.1	100	80-121
74-97-5	Bromochloromethane	25	26.3	105	76-123
75-27-4	Bromodichloromethane	25	25.6	102	79-123
75-25-2	Bromoform	25	23.3	93	66-123
104-51-8	n-Butylbenzene	25	26.3	105	79-126
135-98-8	sec-Butylbenzene	25	28.6	114	83-133
98-06-6	tert-Butylbenzene	25	27.9	112	80-133
108-90-7	Chlorobenzene	25	27.0	108	82-124
75-00-3	Chloroethane	25	25.9	104	62-144
67-66-3	Chloroform	25	26.0	104	80-124
95-49-8	o-Chlorotoluene	25	27.5	110	81-127
106-43-4	p-Chlorotoluene	25	27.5	110	83-130
110-75-8	2-Chloroethyl vinyl ether	125	93.5	75	56-122
75-15-0	Carbon disulfide	25	35.0	140	66-148
56-23-5	Carbon tetrachloride	25	27.2	109	76-136
75-34-3	1,1-Dichloroethane	25	27.1	108	81-122
75-35-4	1,1-Dichloroethylene	25	31.8	127	78-137
563-58-6	1,1-Dichloropropene	25	31.0	124	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	22.2	89	64-123
106-93-4	1,2-Dibromoethane	25	24.1	96	75-120
107-06-2	1,2-Dichloroethane	25	25.0	100	75-125
78-87-5	1,2-Dichloropropane	25	26.4	106	76-124
142-28-9	1,3-Dichloropropane	25	23.8	95	80-118
594-20-7	2,2-Dichloropropane	25	28.6	114	74-139
124-48-1	Dibromochloromethane	25	24.6	98	78-122
75-71-8	Dichlorodifluoromethane	25	24.9	100	42-167
156-59-2	cis-1,2-Dichloroethylene	25	27.3	109	78-120
10061-01-5	cis-1,3-Dichloropropene	25	26.1	104	75-118
541-73-1	m-Dichlorobenzene	25	27.1	108	84-125
95-50-1	o-Dichlorobenzene	25	26.5	106	82-124
106-46-7	p-Dichlorobenzene	25	24.6	98	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.5	110	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3761-BS	B091901.D	1	07/19/13	WV	n/a	n/a	VB3761

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-1, FA6510-2, FA6510-3, FA6510-4, FA6510-5, FA6510-6, FA6510-7, FA6510-8, FA6510-9, FA6510-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	26.2	105	80-120
100-41-4	Ethylbenzene	25	27.2	109	81-121
591-78-6	2-Hexanone	125	124	99	61-129
87-68-3	Hexachlorobutadiene	25	29.0	116	75-142
110-54-3	Hexane	25	29.6	118	69-132
98-82-8	Isopropylbenzene	25	28.5	114	83-132
99-87-6	p-Isopropyltoluene	25	26.1	104	79-130
108-10-1	4-Methyl-2-pentanone	125	122	98	66-122
74-83-9	Methyl bromide	25	24.6	98	59-143
74-87-3	Methyl chloride	25	23.9	96	50-159
74-95-3	Methylene bromide	25	25.0	100	78-119
75-09-2	Methylene chloride	25	27.2	109	69-135
78-93-3	Methyl ethyl ketone	125	108	86	56-143
1634-04-4	Methyl Tert Butyl Ether	25	24.1	96	72-117
91-20-3	Naphthalene	25	22.9	92	63-132
103-65-1	n-Propylbenzene	25	30.1	120	82-133
100-42-5	Styrene	25	25.2	101	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.4	102	77-122
71-55-6	1,1,1-Trichloroethane	25	29.7	119	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	21.6	86	72-120
79-00-5	1,1,2-Trichloroethane	25	24.5	98	76-119
87-61-6	1,2,3-Trichlorobenzene	25	25.4	102	68-131
96-18-4	1,2,3-Trichloropropane	25	21.7	87	77-120
120-82-1	1,2,4-Trichlorobenzene	25	24.1	96	73-129
95-63-6	1,2,4-Trimethylbenzene	25	26.0	104	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.5	102	79-120
127-18-4	Tetrachloroethylene	25	29.0	116	76-135
108-88-3	Toluene	25	25.8	103	80-120
79-01-6	Trichloroethylene	25	28.2	113	81-126
75-69-4	Trichlorofluoromethane	25	29.2	117	71-156
75-01-4	Vinyl chloride	25	27.6	110	69-159
108-05-4	Vinyl Acetate	125	121	97	43-154
	m,p-Xylene	50	57.4	115	79-126
95-47-6	o-Xylene	25	25.3	101	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3761-BS	B091901.D	1	07/19/13	WV	n/a	n/a	VB3761

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-1, FA6510-2, FA6510-3, FA6510-4, FA6510-5, FA6510-6, FA6510-7, FA6510-8, FA6510-9, FA6510-10

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	83-118%
17060-07-0	1,2-Dichloroethane-D4	89%	79-125%
2037-26-5	Toluene-D8	90%	85-112%
460-00-4	4-Bromofluorobenzene	90%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3762-BS	B091928.D	1	07/22/13	WV	n/a	n/a	VB3762

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-8, FA6510-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	127	102	50-147
107-02-8	Acrolein	125	357	286*	31-154
107-13-1	Acrylonitrile	125	91.5	73	58-126
71-43-2	Benzene	25	23.3	93	81-122
108-86-1	Bromobenzene	25	26.5	106	80-121
74-97-5	Bromochloromethane	25	22.3	89	76-123
75-27-4	Bromodichloromethane	25	22.6	90	79-123
75-25-2	Bromoform	25	24.6	98	66-123
104-51-8	n-Butylbenzene	25	28.1	112	79-126
135-98-8	sec-Butylbenzene	25	30.4	122	83-133
98-06-6	tert-Butylbenzene	25	29.4	118	80-133
108-90-7	Chlorobenzene	25	27.9	112	82-124
75-00-3	Chloroethane	25	23.2	93	62-144
67-66-3	Chloroform	25	22.1	88	80-124
95-49-8	o-Chlorotoluene	25	28.5	114	81-127
106-43-4	p-Chlorotoluene	25	30.2	121	83-130
110-75-8	2-Chloroethyl vinyl ether	125	78.1	62	56-122
75-15-0	Carbon disulfide	25	30.6	122	66-148
56-23-5	Carbon tetrachloride	25	23.2	93	76-136
75-34-3	1,1-Dichloroethane	25	22.7	91	81-122
75-35-4	1,1-Dichloroethylene	25	26.6	106	78-137
563-58-6	1,1-Dichloropropene	25	27.0	108	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	23.1	92	64-123
106-93-4	1,2-Dibromoethane	25	24.5	98	75-120
107-06-2	1,2-Dichloroethane	25	20.8	83	75-125
78-87-5	1,2-Dichloropropane	25	22.6	90	76-124
142-28-9	1,3-Dichloropropane	25	23.3	93	80-118
594-20-7	2,2-Dichloropropane	25	24.4	98	74-139
124-48-1	Dibromochloromethane	25	25.2	101	78-122
75-71-8	Dichlorodifluoromethane	25	22.4	90	42-167
156-59-2	cis-1,2-Dichloroethylene	25	23.5	94	78-120
10061-01-5	cis-1,3-Dichloropropene	25	22.2	89	75-118
541-73-1	m-Dichlorobenzene	25	29.6	118	84-125
95-50-1	o-Dichlorobenzene	25	28.5	114	82-124
106-46-7	p-Dichlorobenzene	25	26.1	104	78-120
156-60-5	trans-1,2-Dichloroethylene	25	23.4	94	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3762-BS	B091928.D	1	07/22/13	WV	n/a	n/a	VB3762

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-8, FA6510-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	25.8	103	80-120
591-78-6	2-Hexanone	125	119	95	61-129
87-68-3	Hexachlorobutadiene	25	33.3	133	75-142
110-54-3	Hexane	25	24.8	99	69-132
99-87-6	p-Isopropyltoluene	25	28.1	112	79-130
108-10-1	4-Methyl-2-pentanone	125	99.0	79	66-122
74-83-9	Methyl bromide	25	22.3	89	59-143
74-87-3	Methyl chloride	25	21.3	85	50-159
74-95-3	Methylene bromide	25	21.2	85	78-119
75-09-2	Methylene chloride	25	22.2	89	69-135
78-93-3	Methyl ethyl ketone	125	89.0	71	56-143
1634-04-4	Methyl Tert Butyl Ether	25	20.9	84	72-117
91-20-3	Naphthalene	25	25.8	103	63-132
103-65-1	n-Propylbenzene	25	31.6	126	82-133
100-42-5	Styrene	25	25.4	102	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.6	102	77-122
71-55-6	1,1,1-Trichloroethane	25	25.0	100	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	22.5	90	72-120
79-00-5	1,1,2-Trichloroethane	25	24.0	96	76-119
87-61-6	1,2,3-Trichlorobenzene	25	27.9	112	68-131
96-18-4	1,2,3-Trichloropropane	25	22.9	92	77-120
120-82-1	1,2,4-Trichlorobenzene	25	26.1	104	73-129
95-63-6	1,2,4-Trimethylbenzene	25	27.3	109	79-120
108-67-8	1,3,5-Trimethylbenzene	25	27.1	108	79-120
127-18-4	Tetrachloroethylene	25	28.7	115	76-135
108-88-3	Toluene	25	26.0	104	80-120
79-01-6	Trichloroethylene	25	24.4	98	81-126
75-69-4	Trichlorofluoromethane	25	26.7	107	71-156
75-01-4	Vinyl chloride	25	25.1	100	69-159
108-05-4	Vinyl Acetate	125	103	82	43-154
	m,p-Xylene	50	57.4	115	79-126
95-47-6	o-Xylene	25	25.6	102	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3762-BS	B091928.D	1	07/22/13	WV	n/a	n/a	VB3762

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-8, FA6510-9

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	89%	83-118%
17060-07-0	1,2-Dichloroethane-D4	85%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	90%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI118-BS	I13168.D	1	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	27.7	111	81-122
100-41-4	Ethylbenzene	25	26.3	105	81-121
98-82-8	Isopropylbenzene	25	28.9	116	83-132
	m,p-Xylene	50	55.3	111	79-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	108%	79-125%
2037-26-5	Toluene-D8	88%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6550-5MS	B091915.D	1	07/19/13	WV	n/a	n/a	VB3761
FA6550-5MSD	B091916.D	1	07/19/13	WV	n/a	n/a	VB3761
FA6550-5	B091921.D	1	07/19/13	WV	n/a	n/a	VB3761

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-1, FA6510-2, FA6510-3, FA6510-4, FA6510-5, FA6510-6, FA6510-7, FA6510-8, FA6510-9, FA6510-10

CAS No.	Compound	FA6550-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U		125	117	94	114	91	3	50-147/21
107-02-8	Acrolein	20 U		125	250	200*	290	232*	15	31-154/29
107-13-1	Acrylonitrile	10 U		125	117	94	115	92	2	58-126/16
71-43-2	Benzene	0.50	J	25	27.4	108	27.2	107	1	81-122/14
108-86-1	Bromobenzene	1.0 U		25	23.3	93	24.6	98	5	80-121/14
74-97-5	Bromochloromethane	1.0 U		25	25.3	101	26.2	105	3	76-123/14
75-27-4	Bromodichloromethane	1.0 U		25	24.9	100	25.7	103	3	79-123/19
75-25-2	Bromoform	1.0 U		25	22.9	92	23.7	95	3	66-123/21
104-51-8	n-Butylbenzene	1.0 U		25	24.4	98	24.5	98	0	79-126/16
135-98-8	sec-Butylbenzene	1.0 U		25	27.4	110	26.9	108	2	83-133/16
98-06-6	tert-Butylbenzene	1.0 U		25	25.8	103	25.2	101	2	80-133/16
108-90-7	Chlorobenzene	1.0 U		25	25.4	102	26.5	106	4	82-124/14
75-00-3	Chloroethane	2.0 U		25	24.4	98	24.4	98	0	62-144/20
67-66-3	Chloroform	1.0 U		25	24.9	100	25.2	101	1	80-124/15
95-49-8	o-Chlorotoluene	1.0 U		25	24.8	99	26.0	104	5	81-127/15
106-43-4	p-Chlorotoluene	1.0 U		25	25.4	102	26.9	108	6	83-130/15
110-75-8	2-Chloroethyl vinyl ether	5.0 U		125	ND	0*	ND	0*	nc	56-122/23
75-15-0	Carbon disulfide	2.0 U		25	33.7	135	32.3	129	4	66-148/23
56-23-5	Carbon tetrachloride	1.0 U		25	26.8	107	25.6	102	5	76-136/23
75-34-3	1,1-Dichloroethane	1.0 U		25	26.1	104	26.9	108	3	81-122/15
75-35-4	1,1-Dichloroethylene	1.0 U		25	30.6	122	30.0	120	2	78-137/18
563-58-6	1,1-Dichloropropene	1.0 U		25	30.9	124	29.5	118	5	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U		25	21.9	88	22.4	90	2	64-123/18
106-93-4	1,2-Dibromoethane	1.0 U		25	23.7	95	24.3	97	3	75-120/13
107-06-2	1,2-Dichloroethane	1.0 U		25	24.3	97	25.4	102	4	75-125/14
78-87-5	1,2-Dichloropropane	1.0 U		25	25.3	101	26.1	104	3	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U		25	22.5	90	23.7	95	5	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U		25	24.9	100	24.8	99	0	74-139/17
124-48-1	Dibromochloromethane	1.0 U		25	23.6	94	24.7	99	5	78-122/19
75-71-8	Dichlorodifluoromethane	2.0 U		25	21.5	86	19.7	79	9	42-167/19
156-59-2	cis-1,2-Dichloroethylene	1.0 U		25	25.9	104	26.6	106	3	78-120/15
10061-01-5	cis-1,3-Dichloropropene	1.0 U		25	23.7	95	25.1	100	6	75-118/23
541-73-1	m-Dichlorobenzene	1.0 U		25	25.5	102	26.4	106	3	84-125/14
95-50-1	o-Dichlorobenzene	1.0 U		25	24.2	97	25.9	104	7	82-124/14
106-46-7	p-Dichlorobenzene	1.0 U		25	23.2	93	24.5	98	5	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U		25	26.8	107	26.5	106	1	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6550-5MS	B091915.D	1	07/19/13	WV	n/a	n/a	VB3761
FA6550-5MSD	B091916.D	1	07/19/13	WV	n/a	n/a	VB3761
FA6550-5	B091921.D	1	07/19/13	WV	n/a	n/a	VB3761

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-1, FA6510-2, FA6510-3, FA6510-4, FA6510-5, FA6510-6, FA6510-7, FA6510-8, FA6510-9, FA6510-10

CAS No.	Compound	FA6550-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	1.0 U		25	24.2	97	25.3	101	4	80-120/22
100-41-4	Ethylbenzene	1.0 U		25	25.5	102	26.1	104	2	81-121/14
591-78-6	2-Hexanone	10 U		125	119	95	117	94	2	61-129/18
87-68-3	Hexachlorobutadiene	2.0 U		25	27.0	108	26.6	106	1	75-142/19
110-54-3	Hexane	2.0 U		25	29.8	119	26.3	105	12	69-132/20
98-82-8	Isopropylbenzene	1.0 U		25	26.5	106	27.4	110	3	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U		25	24.7	99	25.0	100	1	79-130/16
108-10-1	4-Methyl-2-pentanone	5.0 U		125	129	103	129	103	0	66-122/16
74-83-9	Methyl bromide	2.0 U		25	22.5	90	24.3	97	8	59-143/19
74-87-3	Methyl chloride	2.0 U		25	21.4	86	22.3	89	4	50-159/19
74-95-3	Methylene bromide	2.0 U		25	24.8	99	25.5	102	3	78-119/14
75-09-2	Methylene chloride	5.0 U		25	25.7	103	26.2	105	2	69-135/16
78-93-3	Methyl ethyl ketone	5.0 U		125	112	90	110	88	2	56-143/18
1634-04-4	Methyl Tert Butyl Ether	1.0 U		25	23.7	95	24.5	98	3	72-117/14
91-20-3	Naphthalene	3.0 U		25	22.1	88	22.8	91	3	63-132/25
103-65-1	n-Propylbenzene	1.0 U		25	27.6	110	28.6	114	4	82-133/15
100-42-5	Styrene	1.0 U		25	23.4	94	24.4	98	4	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U		25	23.3	93	25.1	100	7	77-122/19
71-55-6	1,1,1-Trichloroethane	1.0 U		25	28.3	113	27.7	111	2	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U		25	21.7	87	21.9	88	1	72-120/14
79-00-5	1,1,2-Trichloroethane	1.0 U		25	23.7	95	24.4	98	3	76-119/14
87-61-6	1,2,3-Trichlorobenzene	1.0 U		25	22.7	91	24.4	98	7	68-131/25
96-18-4	1,2,3-Trichloropropane	2.0 U		25	21.6	86	22.3	89	3	77-120/16
120-82-1	1,2,4-Trichlorobenzene	1.0 U		25	21.2	85	23.0	92	8	73-129/20
95-63-6	1,2,4-Trimethylbenzene	2.0 U		25	23.9	96	24.7	99	3	79-120/18
108-67-8	1,3,5-Trimethylbenzene	2.0 U		25	23.9	96	24.6	98	3	79-120/19
127-18-4	Tetrachloroethylene	1.0 U		25	27.6	110	26.6	106	4	76-135/16
108-88-3	Toluene	1.4		25	25.8	98	26.1	99	1	80-120/14
79-01-6	Trichloroethylene	1.0 U		25	27.3	109	27.5	110	1	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U		25	29.6	118	26.0	104	13	71-156/21
75-01-4	Vinyl chloride	1.0 U		25	25.5	102	25.7	103	1	69-159/18
108-05-4	Vinyl Acetate	10 U		125	122	98	124	99	2	43-154/14
	m,p-Xylene	0.51	J	50	54.3	108	54.6	108	1	79-126/15
95-47-6	o-Xylene	0.21	J	25	24.1	96	25.1	100	4	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6550-5MS	B091915.D	1	07/19/13	WV	n/a	n/a	VB3761
FA6550-5MSD	B091916.D	1	07/19/13	WV	n/a	n/a	VB3761
FA6550-5	B091921.D	1	07/19/13	WV	n/a	n/a	VB3761

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-1, FA6510-2, FA6510-3, FA6510-4, FA6510-5, FA6510-6, FA6510-7, FA6510-8, FA6510-9, FA6510-10

CAS No.	Surrogate Recoveries	MS	MSD	FA6550-5	Limits
1868-53-7	Dibromofluoromethane	94%	95%	93%	83-118%
17060-07-0	1,2-Dichloroethane-D4	91%	90%	89%	79-125%
2037-26-5	Toluene-D8	91%	90%	91%	85-112%
460-00-4	4-Bromofluorobenzene	88%	89%	94%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6576-3MS	B091942.D	1	07/22/13	WV	n/a	n/a	VB3762
FA6576-3MSD	B091943.D	1	07/22/13	WV	n/a	n/a	VB3762
FA6576-3	B091939.D	1	07/22/13	WV	n/a	n/a	VB3762

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-8, FA6510-9

CAS No.	Compound	FA6576-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U		125	98.2	79	91.9	74	7	50-147/21
107-02-8	Acrolein	20 U		125	290	232*	287	230*	1	31-154/29
107-13-1	Acrylonitrile	10 U		125	94.6	76	91.1	73	4	58-126/16
71-43-2	Benzene	1.0 U		25	22.8	91	22.1	88	3	81-122/14
108-86-1	Bromobenzene	1.0 U		25	25.7	103	26.3	105	2	80-121/14
74-97-5	Bromochloromethane	1.0 U		25	22.3	89	22.2	89	0	76-123/14
75-27-4	Bromodichloromethane	1.0 U		25	21.1	84	20.9	84	1	79-123/19
75-25-2	Bromoform	1.0 U		25	25.2	101	24.1	96	4	66-123/21
104-51-8	n-Butylbenzene	1.0 U		25	26.4	106	25.6	102	3	79-126/16
135-98-8	sec-Butylbenzene	1.0 U		25	28.9	116	28.5	114	1	83-133/16
98-06-6	tert-Butylbenzene	1.0 U		25	27.7	111	27.4	110	1	80-133/16
108-90-7	Chlorobenzene	1.0 U		25	27.3	109	26.3	105	4	82-124/14
75-00-3	Chloroethane	2.0 U		25	21.0	84	21.1	84	0	62-144/20
67-66-3	Chloroform	1.0 U		25	21.1	84	21.1	84	0	80-124/15
95-49-8	o-Chlorotoluene	1.0 U		25	27.4	110	27.7	111	1	81-127/15
106-43-4	p-Chlorotoluene	1.0 U		25	28.2	113	28.8	115	2	83-130/15
110-75-8	2-Chloroethyl vinyl ether	5.0 U		125	1.4	1*	ND	0*	200*	56-122/23
75-15-0	Carbon disulfide	2.0 U		25	28.6	114	27.0	108	6	66-148/23
56-23-5	Carbon tetrachloride	1.0 U		25	22.1	88	21.3	85	4	76-136/23
75-34-3	1,1-Dichloroethane	1.0 U		25	22.0	88	21.9	88	0	81-122/15
75-35-4	1,1-Dichloroethylene	1.0 U		25	24.8	99	23.9	96	4	78-137/18
563-58-6	1,1-Dichloropropene	1.0 U		25	24.9	100	24.4	98	2	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U		25	23.5	94	23.8	95	1	64-123/18
106-93-4	1,2-Dibromoethane	1.0 U		25	25.0	100	24.6	98	2	75-120/13
107-06-2	1,2-Dichloroethane	1.0 U		25	20.4	82	20.0	80	2	75-125/14
78-87-5	1,2-Dichloropropane	1.0 U		25	21.2	85	21.1	84	0	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U		25	23.9	96	23.4	94	2	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U		25	22.5	90	21.5	86	5	74-139/17
124-48-1	Dibromochloromethane	1.0 U		25	24.8	99	24.5	98	1	78-122/19
75-71-8	Dichlorodifluoromethane	2.0 U		25	19.3	77	20.2	81	5	42-167/19
156-59-2	cis-1,2-Dichloroethylene	1.0 U		25	23.1	92	22.9	92	1	78-120/15
10061-01-5	cis-1,3-Dichloropropene	1.0 U		25	20.9	84	20.4	82	2	75-118/23
541-73-1	m-Dichlorobenzene	1.0 U		25	28.7	115	28.8	115	0	84-125/14
95-50-1	o-Dichlorobenzene	1.0 U		25	27.9	112	27.6	110	1	82-124/14
106-46-7	p-Dichlorobenzene	1.0 U		25	25.9	104	25.8	103	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U		25	22.5	90	22.1	88	2	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6576-3MS	B091942.D	1	07/22/13	WV	n/a	n/a	VB3762
FA6576-3MSD	B091943.D	1	07/22/13	WV	n/a	n/a	VB3762
FA6576-3	B091939.D	1	07/22/13	WV	n/a	n/a	VB3762

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-8, FA6510-9

CAS No.	Compound	FA6576-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	1.0 U		25	25.4	102	24.8	99	2	80-120/22
591-78-6	2-Hexanone	10 U		125	124	99	117	94	6	61-129/18
87-68-3	Hexachlorobutadiene	2.0 U		25	29.6	118	29.5	118	0	75-142/19
110-54-3	Hexane	2.0 U		25	22.9	92	22.4	90	2	69-132/20
99-87-6	p-Isopropyltoluene	1.0 U		25	26.6	106	26.2	105	2	79-130/16
108-10-1	4-Methyl-2-pentanone	5.0 U		125	110	88	105	84	5	66-122/16
74-83-9	Methyl bromide	2.0 U		25	21.2	85	20.6	82	3	59-143/19
74-87-3	Methyl chloride	2.0 U		25	19.8	79	20.5	82	3	50-159/19
74-95-3	Methylene bromide	2.0 U		25	21.4	86	20.3	81	5	78-119/14
75-09-2	Methylene chloride	5.0 U		25	21.3	85	21.3	85	0	69-135/16
78-93-3	Methyl ethyl ketone	5.0 U		125	92.8	74	89.9	72	3	56-143/18
1634-04-4	Methyl Tert Butyl Ether	1.0 U		25	20.4	82	20.2	81	1	72-117/14
91-20-3	Naphthalene	5.0 U		25	25.4	102	24.8	99	2	63-132/25
103-65-1	n-Propylbenzene	1.0 U		25	29.6	118	30.2	121	2	82-133/15
100-42-5	Styrene	1.0 U		25	25.1	100	24.3	97	3	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U		25	24.7	99	24.1	96	2	77-122/19
71-55-6	1,1,1-Trichloroethane	1.0 U		25	23.3	93	22.7	91	3	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U		25	24.4	98	23.7	95	3	72-120/14
79-00-5	1,1,2-Trichloroethane	1.0 U		25	25.0	100	23.8	95	5	76-119/14
87-61-6	1,2,3-Trichlorobenzene	1.0 U		25	26.7	107	26.7	107	0	68-131/25
96-18-4	1,2,3-Trichloropropane	2.0 U		25	24.4	98	24.0	96	2	77-120/16
120-82-1	1,2,4-Trichlorobenzene	1.0 U		25	25.0	100	24.8	99	1	73-129/20
95-63-6	1,2,4-Trimethylbenzene	2.0 U		25	26.6	106	26.0	104	2	79-120/18
108-67-8	1,3,5-Trimethylbenzene	2.0 U		25	25.9	104	25.8	103	0	79-120/19
127-18-4	Tetrachloroethylene	1.0 U		25	28.7	115	26.5	106	8	76-135/16
108-88-3	Toluene	1.0 U		25	25.0	100	24.1	96	4	80-120/14
79-01-6	Trichloroethylene	1.0 U		25	22.8	91	22.6	90	1	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U		25	23.9	96	23.3	93	3	71-156/21
75-01-4	Vinyl chloride	1.0 U		25	22.3	89	22.8	91	2	69-159/18
108-05-4	Vinyl Acetate	10 U		125	102	82	99.1	79	3	43-154/14
	m,p-Xylene	2.0 U		50	56.5	113	54.3	109	4	79-126/15
95-47-6	o-Xylene	1.0 U		25	24.9	100	24.2	97	3	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6576-3MS	B091942.D	1	07/22/13	WV	n/a	n/a	VB3762
FA6576-3MSD	B091943.D	1	07/22/13	WV	n/a	n/a	VB3762
FA6576-3	B091939.D	1	07/22/13	WV	n/a	n/a	VB3762

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-8, FA6510-9

CAS No.	Surrogate Recoveries	MS	MSD	FA6576-3	Limits
1868-53-7	Dibromofluoromethane	88%	88%	87%	83-118%
17060-07-0	1,2-Dichloroethane-D4	85%	85%	85%	79-125%
2037-26-5	Toluene-D8	100%	97%	99%	85-112%
460-00-4	4-Bromofluorobenzene	88%	89%	93%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6536-1MS	I13179.D	5	07/23/13	WV	n/a	n/a	VI118
FA6536-1MSD	I13180.D	5	07/23/13	WV	n/a	n/a	VI118
FA6536-1	I13181.D	5	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6510-7

CAS No.	Compound	FA6536-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	335		125	499	131* [a]	472	110	6	81-122/14
100-41-4	Ethylbenzene	44.7		125	190	116	186	113	2	81-121/14
98-82-8	Isopropylbenzene	18.0		125	176	126	174	125	1	83-132/15
	m,p-Xylene	131		250	427	118	422	116	1	79-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA6536-1	Limits
1868-53-7	Dibromofluoromethane	100%	98%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	104%	107%	79-125%
2037-26-5	Toluene-D8	90%	91%	95%	85-112%
460-00-4	4-Bromofluorobenzene	102%	106%	110%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-MB	X029558.D	1	07/23/13	FS	07/23/13	OP47894	SX1411

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-MB	X029558.D	1	07/23/13	FS	07/23/13	OP47894	SX1411

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-MB	X029558.D	1	07/23/13	FS	07/23/13	OP47894	SX1411

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	42%	14-67%
4165-62-2	Phenol-d5	30%	10-50%
118-79-6	2,4,6-Tribromophenol	74%	33-118%
4165-60-0	Nitrobenzene-d5	70%	42-108%
321-60-8	2-Fluorobiphenyl	69%	40-106%
1718-51-0	Terphenyl-d14	83%	39-121%

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-BS	X029557.D	1	07/23/13	FS	07/23/13	OP47894	SX1411

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	16.0	16	10-69
95-57-8	2-Chlorophenol	50	35.3	71	52-98
59-50-7	4-Chloro-3-methyl phenol	50	35.4	71	54-103
120-83-2	2,4-Dichlorophenol	50	35.2	70	53-103
105-67-9	2,4-Dimethylphenol	50	29.8	60	43-90
51-28-5	2,4-Dinitrophenol	100	68.3	68	44-112
534-52-1	4,6-Dinitro-o-cresol	100	91.4	91	66-121
95-48-7	2-Methylphenol	50	30.0	60	43-90
	3&4-Methylphenol	100	57.3	57	36-88
88-75-5	2-Nitrophenol	50	33.6	67	53-102
100-02-7	4-Nitrophenol	100	34.2	34	18-62
87-86-5	Pentachlorophenol	100	81.9	82	61-115
108-95-2	Phenol	50	16.3	33	19-56
95-95-4	2,4,5-Trichlorophenol	50	41.3	83	62-109
88-06-2	2,4,6-Trichlorophenol	50	39.7	79	59-107
83-32-9	Acenaphthene	50	39.3	79	61-107
208-96-8	Acenaphthylene	50	39.2	78	60-104
62-53-3	Aniline	50	34.2	68	47-100
120-12-7	Anthracene	50	40.3	81	65-108
92-87-5	Benzidine	50	26.4	53	25-99
56-55-3	Benzo(a)anthracene	50	40.3	81	66-111
50-32-8	Benzo(a)pyrene	50	37.6	75	62-107
205-99-2	Benzo(b)fluoranthene	50	39.6	79	65-114
191-24-2	Benzo(g,h,i)perylene	50	42.2	84	66-116
207-08-9	Benzo(k)fluoranthene	50	42.3	85	65-114
101-55-3	4-Bromophenyl phenyl ether	50	42.3	85	65-109
85-68-7	Butyl benzyl phthalate	50	41.7	83	65-112
100-51-6	Benzyl Alcohol	50	31.1	62	46-94
91-58-7	2-Chloronaphthalene	50	38.1	76	57-103
106-47-8	4-Chloroaniline	50	34.2	68	49-105
86-74-8	Carbazole	50	40.9	82	59-113
218-01-9	Chrysene	50	41.3	83	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	35.7	71	51-102
111-44-4	bis(2-Chloroethyl)ether	50	37.6	75	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	38.2	76	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	41.9	84	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-BS	X029557.D	1	07/23/13	FS	07/23/13	OP47894	SX1411

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	32.2	64	48-97
122-66-7	1,2-Diphenylhydrazine	50	40.7	81	61-110
541-73-1	1,3-Dichlorobenzene	50	31.6	63	45-95
106-46-7	1,4-Dichlorobenzene	50	31.6	63	45-98
121-14-2	2,4-Dinitrotoluene	50	39.9	80	61-110
606-20-2	2,6-Dinitrotoluene	50	40.0	80	63-108
91-94-1	3,3'-Dichlorobenzidine	50	37.9	76	46-117
53-70-3	Dibenzo(a,h)anthracene	50	40.2	80	66-119
132-64-9	Dibenzofuran	50	39.5	79	61-106
84-74-2	Di-n-butyl phthalate	50	41.1	82	65-107
117-84-0	Di-n-octyl phthalate	50	42.5	85	62-118
84-66-2	Diethyl phthalate	50	42.1	84	64-108
131-11-3	Dimethyl phthalate	50	42.0	84	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	42.0	84	61-117
206-44-0	Fluoranthene	50	39.4	79	63-106
86-73-7	Fluorene	50	40.1	80	62-108
118-74-1	Hexachlorobenzene	50	40.2	80	63-108
87-68-3	Hexachlorobutadiene	50	29.8	60	42-102
77-47-4	Hexachlorocyclopentadiene	50	28.9	58	39-102
67-72-1	Hexachloroethane	50	30.0	60	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	41.7	83	64-119
78-59-1	Isophorone	50	36.6	73	43-87
90-12-0	1-Methylnaphthalene	50	33.9	68	53-102
91-57-6	2-Methylnaphthalene	50	35.1	70	51-102
88-74-4	2-Nitroaniline	50	42.4	85	54-128
99-09-2	3-Nitroaniline	50	39.0	78	56-106
100-01-6	4-Nitroaniline	50	42.0	84	55-120
91-20-3	Naphthalene	50	32.7	65	47-100
98-95-3	Nitrobenzene	50	34.4	69	50-104
62-75-9	N-Nitrosodimethylamine	50	23.5	47	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	35.9	72	52-104
86-30-6	N-Nitrosodiphenylamine	50	40.4	81	64-108
85-01-8	Phenanthrene	50	40.9	82	66-110
129-00-0	Pyrene	50	40.9	82	64-113
110-86-1	Pyridine	50	22.0	44	23-74
120-82-1	1,2,4-Trichlorobenzene	50	31.0	62	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-BS	X029557.D	1	07/23/13	FS	07/23/13	OP47894	SX1411

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	45%	14-67%
4165-62-2	Phenol-d5	30%	10-50%
118-79-6	2,4,6-Tribromophenol	83%	33-118%
4165-60-0	Nitrobenzene-d5	70%	42-108%
321-60-8	2-Fluorobiphenyl	79%	40-106%
1718-51-0	Terphenyl-d14	87%	39-121%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-BS	U040021.D	1	07/29/13	NAF	07/23/13	OP47894	SU1865

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	15.4	15	10-69
95-57-8	2-Chlorophenol	50	30.2	60	52-98
59-50-7	4-Chloro-3-methyl phenol	50	34.3	69	54-103
120-83-2	2,4-Dichlorophenol	50	33.9	68	53-103
105-67-9	2,4-Dimethylphenol	50	28.5	57	43-90
51-28-5	2,4-Dinitrophenol	100	58.8	59	44-112
534-52-1	4,6-Dinitro-o-cresol	100	72.0	72	66-121
95-48-7	2-Methylphenol	50	26.4	53	43-90
	3&4-Methylphenol	100	48.0	48	36-88
88-75-5	2-Nitrophenol	50	32.4	65	53-102
100-02-7	4-Nitrophenol	100	29.1	29	18-62
87-86-5	Pentachlorophenol	100	70.5	71	61-115
108-95-2	Phenol	50	13.8	28	19-56
95-95-4	2,4,5-Trichlorophenol	50	35.0	70	62-109
88-06-2	2,4,6-Trichlorophenol	50	33.4	67	59-107
83-32-9	Acenaphthene	50	33.6	67	61-107
208-96-8	Acenaphthylene	50	33.8	68	60-104
62-53-3	Aniline	50	30.9	62	47-100
120-12-7	Anthracene	50	35.4	71	65-108
92-87-5	Benzidine	50	21.1	42	25-99
56-55-3	Benzo(a)anthracene	50	34.5	69	66-111
50-32-8	Benzo(a)pyrene	50	32.4	65	62-107
205-99-2	Benzo(b)fluoranthene	50	34.4	69	65-114
191-24-2	Benzo(g,h,i)perylene	50	35.8	72	66-116
207-08-9	Benzo(k)fluoranthene	50	36.4	73	65-114
101-55-3	4-Bromophenyl phenyl ether	50	36.9	74	65-109
85-68-7	Butyl benzyl phthalate	50	37.5	75	65-112
100-51-6	Benzyl Alcohol	50	27.8	56	46-94
91-58-7	2-Chloronaphthalene	50	32.3	65	57-103
106-47-8	4-Chloroaniline	50	33.5	67	49-105
86-74-8	Carbazole	50	34.9	70	59-113
218-01-9	Chrysene	50	34.8	70	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	34.5	69	51-102
111-44-4	bis(2-Chloroethyl)ether	50	32.2	64	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	33.0	66	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	35.1	70	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-BS	U040021.D	1	07/29/13	NAF	07/23/13	OP47894	SU1865

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	28.0	56	48-97
122-66-7	1,2-Diphenylhydrazine	50	34.1	68	61-110
541-73-1	1,3-Dichlorobenzene	50	27.3	55	45-95
106-46-7	1,4-Dichlorobenzene	50	27.1	54	45-98
121-14-2	2,4-Dinitrotoluene	50	34.6	69	61-110
606-20-2	2,6-Dinitrotoluene	50	34.7	69	63-108
91-94-1	3,3'-Dichlorobenzidine	50	36.1	72	46-117
53-70-3	Dibenzo(a,h)anthracene	50	36.2	72	66-119
132-64-9	Dibenzofuran	50	33.6	67	61-106
84-74-2	Di-n-butyl phthalate	50	35.9	72	65-107
117-84-0	Di-n-octyl phthalate	50	36.2	72	62-118
84-66-2	Diethyl phthalate	50	36.2	72	64-108
131-11-3	Dimethyl phthalate	50	35.9	72	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	38.2	76	61-117
206-44-0	Fluoranthene	50	34.1	68	63-106
86-73-7	Fluorene	50	34.5	69	62-108
118-74-1	Hexachlorobenzene	50	35.1	70	63-108
87-68-3	Hexachlorobutadiene	50	29.1	58	42-102
77-47-4	Hexachlorocyclopentadiene	50	22.7	45	39-102
67-72-1	Hexachloroethane	50	26.2	52	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	33.5	67	64-119
78-59-1	Isophorone	50	35.1	70	43-87
90-12-0	1-Methylnaphthalene	50	33.0	66	53-102
91-57-6	2-Methylnaphthalene	50	34.2	68	51-102
88-74-4	2-Nitroaniline	50	36.7	73	54-128
99-09-2	3-Nitroaniline	50	33.4	67	56-106
100-01-6	4-Nitroaniline	50	36.2	72	55-120
91-20-3	Naphthalene	50	30.7	61	47-100
98-95-3	Nitrobenzene	50	33.0	66	50-104
62-75-9	N-Nitrosodimethylamine	50	20.1	40	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	31.5	63	52-104
86-30-6	N-Nitrosodiphenylamine	50	33.6	67	64-108
85-01-8	Phenanthrene	50	35.2	70	66-110
129-00-0	Pyrene	50	35.2	70	64-113
110-86-1	Pyridine	50	19.1	38	23-74
120-82-1	1,2,4-Trichlorobenzene	50	30.0	60	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-BS	U040021.D	1	07/29/13	NAF	07/23/13	OP47894	SU1865

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	40%	14-67%
4165-62-2	Phenol-d5	28%	10-50%
118-79-6	2,4,6-Tribromophenol	72%	33-118%
4165-60-0	Nitrobenzene-d5	67%	42-108%
321-60-8	2-Fluorobiphenyl	67%	40-106%
1718-51-0	Terphenyl-d14	76%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-MS	X029563.D	1	07/23/13	FS	07/23/13	OP47894	SX1411
OP47894-MSD	X029564.D	1	07/23/13	FS	07/23/13	OP47894	SX1411
FA6619-6	X029562.D	1	07/23/13	FS	07/23/13	OP47894	SX1411

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	FA6619-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	50 U		196	83.5	43	78.6	40	6	10-69/39
95-57-8	2-Chlorophenol	5.0 U		98	71.3	73	64.6	66	10	52-98/25
59-50-7	4-Chloro-3-methyl phenol	5.0 U		98	71.7	73	67.5	69	6	54-103/23
120-83-2	2,4-Dichlorophenol	5.0 U		98	70.3	72	64.4	66	9	53-103/26
105-67-9	2,4-Dimethylphenol	5.0 U		98	60.6	62	55.8	57	8	43-90/27
51-28-5	2,4-Dinitrophenol	25 U		196	152	78	150	77	1	44-112/25
534-52-1	4,6-Dinitro-o-cresol	10 U		196	180	92	175	89	3	66-121/23
95-48-7	2-Methylphenol	5.0 U		98	67.6	69	60.8	62	11	43-90/28
	3&4-Methylphenol	5.0 U		196	134	68	121	62	10	36-88/28
88-75-5	2-Nitrophenol	5.0 U		98	66.1	67	61.1	62	8	53-102/29
100-02-7	4-Nitrophenol	25 U		196	108	55	103	53	5	18-62/33
87-86-5	Pentachlorophenol	25 U		196	174	89	164	84	6	61-115/26
108-95-2	Phenol	5.0 U		98	47.0	48	42.0	43	11	19-56/35
95-95-4	2,4,5-Trichlorophenol	5.0 U		98	79.8	81	76.9	78	4	62-109/22
88-06-2	2,4,6-Trichlorophenol	5.0 U		98	78.5	80	73.5	75	7	59-107/23
83-32-9	Acenaphthene	5.0 U		98	75.0	77	73.2	75	2	61-107/22
208-96-8	Acenaphthylene	5.0 U		98	77.0	79	74.0	75	4	60-104/22
62-53-3	Aniline	5.0 U		98	65.2	67	60.8	62	7	47-100/30
120-12-7	Anthracene	5.0 U		98	79.8	81	77.7	79	3	65-108/20
92-87-5	Benzidine	25 U		98	11.1	11*	12.2	12*	9	25-99/31
56-55-3	Benzo(a)anthracene	5.0 U		98	79.3	81	78.8	80	1	66-111/22
50-32-8	Benzo(a)pyrene	5.0 U		98	74.3	76	73.0	74	2	62-107/23
205-99-2	Benzo(b)fluoranthene	5.0 U		98	81.3	83	75.8	77	7	65-114/23
191-24-2	Benzo(g,h,i)perylene	5.0 U		98	83.0	85	79.9	81	4	66-116/23
207-08-9	Benzo(k)fluoranthene	5.0 U		98	83.4	85	82.3	84	1	65-114/24
101-55-3	4-Bromophenyl phenyl ether	5.0 U		98	83.5	85	80.6	82	4	65-109/23
85-68-7	Butyl benzyl phthalate	5.0 U		98	82.8	84	81.2	83	2	65-112/24
100-51-6	Benzyl Alcohol	5.0 U		98	68.8	70	62.9	64	9	46-94/27
91-58-7	2-Chloronaphthalene	5.0 U		98	74.5	76	70.4	72	6	57-103/23
106-47-8	4-Chloroaniline	5.0 U		98	58.3	59	55.8	57	4	49-105/27
86-74-8	Carbazole	5.0 U		98	79.4	81	77.4	79	3	59-113/21
218-01-9	Chrysene	5.0 U		98	80.4	82	79.0	81	2	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	5.0 U		98	70.8	72	65.8	67	7	51-102/28
111-44-4	bis(2-Chloroethyl)ether	5.0 U		98	75.8	77	67.0	68	12	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	5.0 U		98	76.5	78	69.3	71	10	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	5.0 U		98	81.6	83	78.8	80	3	62-105/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-MS	X029563.D	1	07/23/13	FS	07/23/13	OP47894	SX1411
OP47894-MSD	X029564.D	1	07/23/13	FS	07/23/13	OP47894	SX1411
FA6619-6	X029562.D	1	07/23/13	FS	07/23/13	OP47894	SX1411

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	FA6619-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	5.0 U		98	70.7	72	62.8	64	12	48-97/24
122-66-7	1,2-Diphenylhydrazine	5.0 U		98	80.2	82	77.3	79	4	61-110/24
541-73-1	1,3-Dichlorobenzene	5.0 U		98	70.9	72	62.5	64	13	45-95/25
106-46-7	1,4-Dichlorobenzene	5.0 U		98	69.6	71	61.5	63	12	45-98/25
121-14-2	2,4-Dinitrotoluene	5.0 U		98	77.5	79	77.1	79	1	61-110/21
606-20-2	2,6-Dinitrotoluene	5.0 U		98	77.5	79	77.2	79	0	63-108/21
91-94-1	3,3'-Dichlorobenzidine	5.0 U		98	65.1	66	63.0	64	3	46-117/29
53-70-3	Dibenzo(a,h)anthracene	5.0 U		98	81.9	84	77.1	79	6	66-119/24
132-64-9	Dibenzofuran	5.0 U		98	77.5	79	74.1	76	4	61-106/21
84-74-2	Di-n-butyl phthalate	5.0 U		98	81.0	83	79.7	81	2	65-107/21
117-84-0	Di-n-octyl phthalate	5.0 U		98	84.2	86	81.1	83	4	62-118/24
84-66-2	Diethyl phthalate	5.0 U		98	82.0	84	80.7	82	2	64-108/21
131-11-3	Dimethyl phthalate	5.0 U		98	82.7	84	81.1	83	2	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	5.0 U		98	83.1	85	81.4	83	2	61-117/23
206-44-0	Fluoranthene	5.0 U		98	77.8	79	75.2	77	3	63-106/21
86-73-7	Fluorene	5.0 U		98	78.1	80	76.2	78	2	62-108/20
118-74-1	Hexachlorobenzene	5.0 U		98	78.6	80	76.7	78	2	63-108/22
87-68-3	Hexachlorobutadiene	5.0 U		98	65.6	67	59.9	61	9	42-102/28
77-47-4	Hexachlorocyclopentadiene	5.0 U		98	66.9	68	62.4	64	7	39-102/29
67-72-1	Hexachloroethane	5.0 U		98	69.6	71	61.1	62	13	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	5.0 U		98	81.6	83	79.7	81	2	64-119/24
78-59-1	Isophorone	5.0 U		98	72.3	74	68.0	69	6	43-87/25
90-12-0	1-Methylnaphthalene	5.0 U		98	67.1	68	63.4	65	6	53-102/27
91-57-6	2-Methylnaphthalene	5.0 U		98	69.6	71	64.4	66	8	51-102/26
88-74-4	2-Nitroaniline	5.0 U		98	80.8	82	78.8	80	3	54-128/24
99-09-2	3-Nitroaniline	5.0 U		98	58.7	60	61.1	62	4	56-106/27
100-01-6	4-Nitroaniline	5.0 U		98	77.3	79	76.1	78	2	55-120/24
91-20-3	Naphthalene	5.0 U		98	67.2	69	62.1	63	8	47-100/29
98-95-3	Nitrobenzene	5.0 U		98	67.5	69	62.9	64	7	50-104/28
62-75-9	N-Nitrosodimethylamine	5.0 U		98	62.2	63	55.9	57	11	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	5.0 U		98	70.5	72	63.5	65	10	52-104/25
86-30-6	N-Nitrosodiphenylamine	5.0 U		98	78.5	80	77.3	79	2	64-108/23
85-01-8	Phenanthrene	5.0 U		98	81.1	83	79.5	81	2	66-110/21
129-00-0	Pyrene	5.0 U		98	82.0	84	80.0	82	2	64-113/23
110-86-1	Pyridine	10 U		98	52.2	53	47.0	48	10	23-74/34
120-82-1	1,2,4-Trichlorobenzene	5.0 U		98	65.0	66	60.8	62	7	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47894-MS	X029563.D	1	07/23/13	FS	07/23/13	OP47894	SX1411
OP47894-MSD	X029564.D	1	07/23/13	FS	07/23/13	OP47894	SX1411
FA6619-6	X029562.D	1	07/23/13	FS	07/23/13	OP47894	SX1411

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Surrogate Recoveries	MS	MSD	FA6619-6	Limits
367-12-4	2-Fluorophenol	60%	52%	44%	14-67%
4165-62-2	Phenol-d5	47%	42%	30%	10-50%
118-79-6	2,4,6-Tribromophenol	81%	80%	82%	33-118%
4165-60-0	Nitrobenzene-d5	68%	63%	77%	42-108%
321-60-8	2-Fluorobiphenyl	77%	72%	79%	40-106%
1718-51-0	Terphenyl-d14	85%	83%	83%	39-121%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5020-MB	CD123054.D	1	07/19/13	CP	n/a	n/a	GCD5020

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6510-1, FA6510-3, FA6510-5, FA6510-9

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	91%	70-131%
98-08-8	aaa-Trifluorotoluene	80%	69-143%

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5021-MB	CD123084.D	1	07/22/13	CP	n/a	n/a	GCD5021

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6510-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	107%	70-131%
98-08-8	aaa-Trifluorotoluene	96%	69-143%

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5020-BS	CD123053.D	1	07/19/13	CP	n/a	n/a	GCD5020

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6510-1, FA6510-3, FA6510-5, FA6510-9

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.378	95	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	105%	70-131%
98-08-8	aaa-Trifluorotoluene	107%	69-143%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5021-BS	CD123083.D	1	07/22/13	CP	n/a	n/a	GCD5021

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6510-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.419	105	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	112%	70-131%
98-08-8	aaa-Trifluorotoluene	112%	69-143%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6507-1MS	CD123061.D	1	07/19/13	CP	n/a	n/a	GCD5020
FA6507-1MSD	CD123062.D	1	07/19/13	CP	n/a	n/a	GCD5020
FA6507-1	CD123055.D	1	07/19/13	CP	n/a	n/a	GCD5020

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6510-1, FA6510-3, FA6510-5, FA6510-9

CAS No.	Compound	FA6507-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.0633	J	0.4	0.433	92	0.431	92	0	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA6507-1	Limits
460-00-4	4-Bromofluorobenzene	107%	105%	101%	70-131%
98-08-8	aaa-Trifluorotoluene	108%	108%	90%	69-143%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6638-1MS	CD123091.D	1	07/22/13	CP	n/a	n/a	GCD5021
FA6638-1MSD	CD123092.D	1	07/22/13	CP	n/a	n/a	GCD5021
FA6638-1	CD123087.D	1	07/22/13	CP	n/a	n/a	GCD5021

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6510-7

CAS No.	Compound	FA6638-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		0.4	0.398	100	0.382	96	4	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA6638-1	Limits
460-00-4	4-Bromofluorobenzene	98%	97%	104%	70-131%
98-08-8	aaa-Trifluorotoluene	100%	97%	88%	69-143%

8.3.2

8

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-MB	LL49491.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	90%	50-131%

Blank Spike Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-BS	LL49490.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.843	84	56-123
	TPH (> C22-C36)	1	0.883	88	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	110%	50-131%

9.2.1

9

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6510
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-MS	LL49516.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870
OP47901-MSD	LL49517.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870
FA6510-3	LL49515.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9

CAS No.	Compound	FA6510-3 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	6.62		1.92	8.13	79	7.32	36* [a]	10	56-123/33
	TPH (> C22-C36)	ND		1.92	1.75	91	1.63	85	7	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA6510-3	Limits
84-15-1	o-Terphenyl	108%	96%	95%	50-131%

(a) Outside control limits due to high level in sample relative to spike amount.

9.3.1

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6510
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP22103/GN56963	2.0	0.0	mg/l	198	197	99.5	85-115%
Chemical Oxygen Demand	GP22147/GN56909	20	0.0	mg/l	50.0	50.9	102.0	87-122%
Chloride	GP22111/GN56840	2.0	0.0	mg/l	50	51.1	102.2	90-110%
Chloride	GP22112/GN56840	2.0	0.0	mg/l	50	51.5	103.0	90-110%
Nitrogen, Ammonia	GP22191/GN57052	0.10	0.0	mg/l	2.5	2.61	104.4	90-110%
Nitrogen, Nitrate	GP22111/GN56840	0.10	0.0	mg/l	2.5	2.56	102.4	90-110%
Nitrogen, Nitrate	GP22112/GN56840	0.10	0.0	mg/l	2.5	2.57	102.8	90-110%
Nitrogen, Nitrite	GP22111/GN56840	0.10	0.0	mg/l	2.5	2.65	106.0	90-110%
Nitrogen, Nitrite	GP22112/GN56840	0.10	0.0	mg/l	2.5	2.70	108.0	90-110%
Nitrogen, Total Kjeldahl	GP22158/GN56966	0.53	0.0	mg/l	2.63	2.74	104.4	90-110%
Solids, Total Dissolved	GN56888	100	0.0	mg/l				
Sulfate	GP22111/GN56840	2.0	0.0	mg/l	50	50.1	100.2	90-110%
Sulfate	GP22112/GN56840	2.0	0.0	mg/l	50	50.4	100.8	90-110%

Associated Samples:
Batch GN56832: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GN56888: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22103: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22111: FA6510-1, FA6510-3
Batch GP22112: FA6510-5, FA6510-7, FA6510-9
Batch GP22147: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22158: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22191: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6510
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP22103/GN56963	FA6510-1	mg/l	4.0 U	0.0	7.7	0-30%
Solids, Total Dissolved	GN56888	FA6570-1	mg/l	4670	4670	0.0	0-5%

Associated Samples:
Batch GN56888: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22103: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6510
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP22147/GN56909	FA6573-1	mg/l	0.0	50.0	55.8	107.0	87-122%
Chloride	GP22111/GN56840	FA6472-4	mg/l	9.2	50	61.0	103.6	90-110%
Chloride	GP22112/GN56840	FA6508-4	mg/l	21.9	50	69.5	95.2	90-110%
Nitrogen, Ammonia	GP22191/GN57052	FA6713-1	mg/l	0.030 U	2.5	2.5	100.0	90-110%
Nitrogen, Nitrate	GP22111/GN56840	FA6472-4	mg/l	0.25 U	2.5	2.6	104.0	90-110%
Nitrogen, Nitrate	GP22112/GN56840	FA6508-4	mg/l	0.50 U	2.5	2.6	104.0	90-110%
Nitrogen, Nitrite	GP22111/GN56840	FA6472-4	mg/l	0.25 U	2.5	2.6	104.0	90-110%
Nitrogen, Nitrite	GP22112/GN56840	FA6508-4	mg/l	0.50 U	2.5	2.5	100.0	90-110%
Nitrogen, Total Kjeldahl	GP22158/GN56966	FA6510-1	mg/l	2.4	2.63	4.9	95.2	90-110%
Sulfate	GP22111/GN56840	FA6472-4	mg/l	481	50	532	102.0	90-110%
Sulfate	GP22112/GN56903	FA6508-4	mg/l	1160	50	1220	120.0(a)	90-110%

Associated Samples:
Batch GN56832: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22111: FA6510-1, FA6510-3
Batch GP22112: FA6510-5, FA6510-7, FA6510-9
Batch GP22147: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22158: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22191: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6510
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chemical Oxygen Demand	GP22147/GN56909	FA6573-1	mg/l	0.0	50.0	55.8	0.0	26%
Chloride	GP22111/GN56840	FA6472-4	mg/l	9.2	50	61.0	0.0	20%
Chloride	GP22112/GN56840	FA6508-4	mg/l	21.9	50	70.7	1.7	20%
Nitrogen, Ammonia	GP22191/GN57052	FA6713-1	mg/l	0.030 U	2.5	2.6	3.9	20%
Nitrogen, Nitrate	GP22111/GN56840	FA6472-4	mg/l	0.25 U	2.5	2.6	0.0	20%
Nitrogen, Nitrate	GP22112/GN56840	FA6508-4	mg/l	0.50 U	2.5	2.7	3.8	20%
Nitrogen, Nitrite	GP22111/GN56840	FA6472-4	mg/l	0.25 U	2.5	2.6	0.0	20%
Nitrogen, Nitrite	GP22112/GN56840	FA6508-4	mg/l	0.50 U	2.5	2.6	3.9	20%
Nitrogen, Total Kjeldahl	GP22158/GN56966	FA6510-1	mg/l	2.4	2.63	5.1	4.0	20%
Sulfate	GP22111/GN56840	FA6472-4	mg/l	481	50	525	1.3	20%
Sulfate	GP22112/GN56903	FA6508-4	mg/l	1160	50	1160	2.6	20%

Associated Samples:
Batch GN56832: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22111: FA6510-1, FA6510-3
Batch GP22112: FA6510-5, FA6510-7, FA6510-9
Batch GP22147: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22158: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
Batch GP22191: FA6510-1, FA6510-3, FA6510-5, FA6510-7, FA6510-9
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Southeast ACCUTEST LABORATORIES

08/12/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA6510R

Sampling Dates: 07/16/13 - 07/17/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **40**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

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Accutest LabLink@144167 12:46 12-Aug-2013

Sample Summary

Bhate Environmental

Job No: FA6510R

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA6510-1FR	07/16/13	15:00	DMZB	07/18/13	AQ	Ground Water	SS61-MW29
FA6510-1R	07/16/13	15:00	DMZB	07/18/13	AQ	Ground Water	SS61-MW29
FA6510-3FR	07/16/13	15:10	DMZB	07/18/13	AQ	Ground Water	SS61-MW28
FA6510-3R	07/16/13	15:10	DMZB	07/18/13	AQ	Ground Water	SS61-MW28
FA6510-5FR	07/17/13	09:00	DMZB	07/18/13	AQ	Ground Water	SS61-MW27
FA6510-5R	07/17/13	09:00	DMZB	07/18/13	AQ	Ground Water	SS61-MW27
FA6510-7FR	07/17/13	09:15	DMZB	07/18/13	AQ	Ground Water	SS61-MW26
FA6510-7R	07/17/13	09:15	DMZB	07/18/13	AQ	Ground Water	SS61-MW26
FA6510-9FR	07/17/13	10:50	DMZB	07/18/13	AQ	Ground Water	SS61-MW24
FA6510-9R	07/17/13	10:50	DMZB	07/18/13	AQ	Ground Water	SS61-MW24

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA6510R

Site: Holloman AFB; SS61 VCM **Report Date** 8/5/2013 12:08:04 PM

5 Samples were collected between 07/16/2013 and 07/17/2013 and were received at Accutest SE on 07/18/2013 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA6510R. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP25607

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6510-3RDUP, FA6510-3RMS, FA6510-3RMSD, FA6510-3RPS, FA6510-3RSDL were used as the QC samples for metals.

RPD(s) for Serial Dilution for Iron are outside control limits for sample MP25607-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: August 5, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA6510R
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/16/13 thru 07/17/13

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA6510-1FR	**SS61-MW29**					
Manganese		584	15	0.70	ug/l	EPA 200.7
FA6510-1R	**SS61-MW29**					
Manganese		562	15	0.70	ug/l	EPA 200.7
FA6510-3FR	**SS61-MW28**					
Iron		69.8 J	300	29	ug/l	EPA 200.7
Manganese		875	15	0.70	ug/l	EPA 200.7
FA6510-3R	**SS61-MW28**					
Iron		33.5 J	300	29	ug/l	EPA 200.7
Manganese		612	15	0.70	ug/l	EPA 200.7
Iron, Ferrous [a]		0.074 J	0.10	0.030	mg/l	SM18 3500FED
FA6510-5FR	**SS61-MW27**					
Iron		3620	300	29	ug/l	EPA 200.7
Manganese		2490	15	0.70	ug/l	EPA 200.7
FA6510-5R	**SS61-MW27**					
Iron		4310	300	29	ug/l	EPA 200.7
Manganese		2450	15	0.70	ug/l	EPA 200.7
Iron, Ferric [b]		0.31 J	0.80	0.18	mg/l	SM18 3500FED M
Iron, Ferrous [a]		4.0	0.50	0.16	mg/l	SM18 3500FED
FA6510-7FR	**SS61-MW26**					
Manganese		103	15	0.70	ug/l	EPA 200.7
FA6510-7R	**SS61-MW26**					
Manganese		109	15	0.70	ug/l	EPA 200.7
Iron, Ferrous [a]		0.074 J	0.10	0.030	mg/l	SM18 3500FED
FA6510-9FR	**SS61-MW24**					
Iron		52.5 J	300	29	ug/l	EPA 200.7
Manganese		322	15	0.70	ug/l	EPA 200.7

Summary of Hits

Job Number: FA6510R
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/16/13 thru 07/17/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA6510-9R	**SS61-MW24**					
Iron		2220	300	29	ug/l	EPA 200.7
Manganese		363	15	0.70	ug/l	EPA 200.7
Iron, Ferric [b]		2.0	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [a]		0.18	0.10	0.030	mg/l	SM18 3500FED

(a) Field analysis required. Received out of hold time and analyzed by request.
(b) Calculated as: (Iron) - (Iron, Ferrous)

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1FR	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	29 U	300	29	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	584	15	0.70	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10944
(2) Prep QC Batch: MP25607

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1R	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	29 U	300	29	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	562	15	0.70	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10944
(2) Prep QC Batch: MP25607

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA6510-1R	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Iron, Ferric [a]	0.059 U	0.40	0.059	mg/l	1	07/25/13 16:35	LM	SM18 3500FED M
Iron, Ferrous [b]	0.030 U	0.10	0.030	mg/l	1	07/18/13 14:05	MG	SM18 3500FED

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3FR	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	69.8 J	300	29	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	875	15	0.70	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10944
(2) Prep QC Batch: MP25607

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3R	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	33.5 J	300	29	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	612	15	0.70	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10944
(2) Prep QC Batch: MP25607

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA6510-3R	**Date Sampled:**	07/16/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Iron, Ferric [a]	0.059 U	0.40	0.059	mg/l	1	07/25/13 17:02	LM	SM18 3500FED M
Iron, Ferrous [b]	0.074 J	0.10	0.030	mg/l	1	07/18/13 14:05	MG	SM18 3500FED

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5FR	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	3620	300	29	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	2490	15	0.70	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10944
(2) Prep QC Batch: MP25607

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5R	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	4310	300	29	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	2450	15	0.70	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10944
(2) Prep QC Batch: MP25607

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA6510-5R	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Iron, Ferric [a]	0.31 J	0.80	0.18	mg/l	1	07/25/13 17:07	LM	SM18 3500FED M
Iron, Ferrous [b]	4.0	0.50	0.16	mg/l	5	07/18/13 14:05	MG	SM18 3500FED

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7FR	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	29 U	300	29	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	103	15	0.70	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10944
(2) Prep QC Batch: MP25607

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7R	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	29 U	300	29	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	109	15	0.70	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10944
(2) Prep QC Batch: MP25607

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA6510-7R	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Iron, Ferric [a]	0.059 U	0.40	0.059	mg/l	1	07/25/13 17:11	LM	SM18 3500FED M
Iron, Ferrous [b]	0.074 J	0.10	0.030	mg/l	1	07/18/13 14:05	MG	SM18 3500FED

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9FR	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	52.5 J	300	29	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	322	15	0.70	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10944
(2) Prep QC Batch: MP25607

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9R	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	2220	300	29	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	363	15	0.70	ug/l	1	08/02/13	08/02/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10944
(2) Prep QC Batch: MP25607

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA6510-9R	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/18/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Iron, Ferric [a]	2.0	0.40	0.059	mg/l	1	07/25/13 17:24	LM	SM18 3500FED M
Iron, Ferrous [b]	0.18	0.10	0.030	mg/l	1	07/18/13 14:05	MG	SM18 3500FED

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

brate ENVIRONMENTAL CONSTRUCTION ENERGY
1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA6510

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07172013-01
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1	SS61-MW29	07/16/2013	1500	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				1
2	Trip Blank			-	TB	1	WQ	2	X													1
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

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

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	7/17/13	1500	1. [signature]		10:00
2. [signature]			2. [signature] (Accutest)	7-18-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest
Lab Recipient:
Shipped No.:
Airbill Number: 7962 4765 1588
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

28 30 36 34 40

FA6510R: Chain of Custody
Page 1 of 7

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FA 6510

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07172013-02
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
3	SS61-MW28	07/16/2013	1510	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				2
4	Trip Blank			-	TB	1	WQ	2	X													2
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1. D. McNeil	7/17/13	1500	1. FX		10:00
2. FX			2. Cesar (ALH)	7-18-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7962 4765 1165
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA6510R: Chain of Custody
Page 2 of 7

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

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FA6510

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07172013-03
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
5	SS61-MW27	07/17/2013	0900	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				3
6	Trip Blank			-	TB	1	WQ	2	X													3
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	7/17/13	1500	1. FX		10:00
2. FX			2. [signature] (AISR)	7-18-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:		Shipped No.:	
Method of Shipment:	Fed Ex	Airbill Number:	7962 4765 1360
Analytical Lab:	Accutest	Delivery Location:	Orlando, FL
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA6510R: Chain of Custody
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FA6510

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Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07172013-04
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
7	SS61-MW26	07/17/2013	0915	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				4
8	Trip Blank			-	TB	1	WQ	2	X													4
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. D Neil	7/17/13	1500	1. FX		10:00
2. FX			2. L Boone (AbSte)	7-18-13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: ____ Shipped No.: ____
Method of Shipment: Fed Ex Airbill Number: 7962 4765 1641
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA6510R: Chain of Custody
Page 4 of 7

bhate ENVIRONMENTAL CONSTRUCTION ENERGY

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FA6510

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07172013-05
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
9	SS61-MW24	07/17/2013	1050	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				5
10	Trip Blank			-	TB	1	WQ	2	X													5

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. D.McN	7/17/13	1500	1. FX		10:00
2. FX			2. [illegible] (ALSK)	7.18.13	
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest
Lab Recipient:
Shipped No.:
Airbill Number: 7962 4765 1658
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01 if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 6510 CLIENT: BHATE PROJECT: SS-61

DATE/TIME RECEIVED: 7-18-13 10:00 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: 5

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7962 4765 1388

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [X] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [X] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [X] RECEIVED WATER TRIP BLANK 5
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.2 2.6 3.2 3.0 3.6
- [ ] CORRECTED TEMPS: 2.8 3.0 3.6 3.4 4.0

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE JC 7-18-13 REVIEWER SIGNATURE/DATE [signature] 07/18/13

NF 12/10

receipt confirmation 122910.xls

5.1

5

FA6510R: Chain of Custody

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Job Change Order: FA6510_8/1/2013

Requested Date:	8/1/2013	**Received Date:**	7/18/2013
Account Name:	Bhate Environmental	**Due Date:**	8/1/2013
Project	Holloman AFB; SS61 VCM	**Deliverable:**	COMMBN
CSR:	JDS	**TAT (Days):**	3

Sample #:
FA6510-1,1F, 3, 3F,5, 5F,7, 7F, 9, 9F

Change: Please re-log and analyze metals Fe and Mn via 200.7.
Thank you.

Above Changes Per: Lab **Date:** 8/1/2013

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA6510R
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25607
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:					08/02/13		08/02/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	15	15				
Antimony	6.0	1.3	1.3				
Arsenic	10	1.6	2.5				
Barium	200	1	1				
Beryllium	4.0	.5	.5				
Cadmium	5.0	.5	.5				
Calcium	1000	50	50				
Chromium	10	1.8	2				
Cobalt	50	.5	.5				
Copper	25	1	1				
Iron	300	29	29	-0.30	<300	-4.2	<300
Lead	5.0	1.1	1.1				
Magnesium	5000	74	74				
Manganese	15	.7	.7	-0.10	<15	2.4	<15
Molybdenum	50	.6	1				
Nickel	40	.5	.5				
Potassium	10000	200	200				
Selenium	10	2	2				
Silver	10	.5	.5				
Sodium	10000	500	500				
Strontium	10	.5	.5				
Thallium	10	1.3	1.3				
Tin	50	.7	1.8				
Titanium	10	.9	1				
Vanadium	50	.5	1				
Zinc	20	3	5				

Associated samples MP25607: FA6510-1R, FA6510-3R, FA6510-5R, FA6510-7R, FA6510-9R, FA6510-1FR, FA6510-3FR, FA6510-5FR, FA6510-7FR, FA6510-9FR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA6510R
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25607
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			08/02/13					08/02/13	
Metal	FA6510-3R Original	DUP	RPD	QC Limits	FA6510-3R Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron	33.5	30.3	10.0	0-20	33.5	25700	26000	98.7	70-130
Lead									
Magnesium									
Manganese	612	594	3.0	0-20	612	1060	500	89.6	70-130
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP25607: FA6510-1R, FA6510-3R, FA6510-5R, FA6510-7R, FA6510-9R, FA6510-1FR, FA6510-3FR, FA6510-5FR, FA6510-7FR, FA6510-9FR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA6510R
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25607
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 08/02/13

Metal	FA6510-3R Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	33.5	26600	26000	102.2	3.4	20
Lead						
Magnesium						
Manganese	612	1120	500	101.6	5.5	20
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP25607: FA6510-1R, FA6510-3R, FA6510-5R, FA6510-7R, FA6510-9R, FA6510-1FR, FA6510-3FR, FA6510-5FR, FA6510-7FR, FA6510-9FR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA6510R
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25607
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 08/02/13

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	27500	26000	105.8	85-115
Lead				
Magnesium				
Manganese	524	500	104.8	85-115
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP25607: FA6510-1R, FA6510-3R, FA6510-5R, FA6510-7R, FA6510-9R, FA6510-1FR, FA6510-3FR, FA6510-5FR, FA6510-7FR, FA6510-9FR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA6510R
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25607
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 08/02/13

Metal	FA6510-3R Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	33.5	0.00	100.0(a)	0-10
Lead				
Magnesium				
Manganese	612	638	4.3	0-10
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP25607: FA6510-1R, FA6510-3R, FA6510-5R, FA6510-7R, FA6510-9R, FA6510-1FR, FA6510-3FR, FA6510-5FR, FA6510-7FR, FA6510-9FR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA6510R
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25607
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 08/02/13

Metal	Sample ml	Final ml	FA6510-3R Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10	33.5	32.83	3133	0.2	150	3000	103.3	85-115
Lead										
Magnesium										
Manganese	9.8	10	611.6	599.368	643.8	0.2	2.5	50	88.9	85-115
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP25607: FA6510-1R, FA6510-3R, FA6510-5R, FA6510-7R, FA6510-9R, FA6510-1FR, FA6510-3FR, FA6510-5FR, FA6510-7FR, FA6510-9FR

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6510R
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Iron, Ferrous	GN56825	0.10	0.0	mg/l	0.500	0.52	103.9	82-115%

Associated Samples:
Batch GN56825: FA6510-1R, FA6510-3R, FA6510-5R, FA6510-7R, FA6510-9R
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6510R
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Iron, Ferrous	GN56825	FA6510-9R	mg/l	0.18	0.084	12.5	0-31%

Associated Samples:
Batch GN56825: FA6510-1R, FA6510-3R, FA6510-5R, FA6510-7R, FA6510-9R
(*) Outside of QC limits

Southeast
ACCUTEST LABORATORIES

08/12/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA6583

Sampling Dates: 07/17/13 - 07/18/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **124**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), AK, AR, GA, KY, MA, NV, OK, UT, VA, WA, WI

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Accutest LabLink@144167 12:47 12-Aug-2013

Sample Summary

Bhate Environmental

Job No: FA6583

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA6583-1	07/17/13	14:50	DM	07/19/13	AQ	Ground Water	SS61-MW21
FA6583-1F	07/17/13	14:50	DM	07/19/13	AQ	Groundwater Filtered	SS61-MW21
FA6583-2	07/17/13	00:00	DM	07/19/13	AQ	Trip Blank Water	TRIP BLANK
FA6583-3	07/17/13	15:30	DM	07/19/13	AQ	Ground Water	SS61-MW23
FA6583-3F	07/17/13	15:30	DM	07/19/13	AQ	Groundwater Filtered	SS61-MW23
FA6583-4	07/17/13	00:00	DM	07/19/13	AQ	Trip Blank Water	TRIP BLANK
FA6583-5	07/18/13	09:00	DM	07/19/13	AQ	Ground Water	SS61-MW25
FA6583-5F	07/18/13	09:00	DM	07/19/13	AQ	Groundwater Filtered	SS61-MW25
FA6583-6	07/18/13	00:00	DM	07/19/13	AQ	Trip Blank Water	TRIP BLANK
FA6583-7	07/18/13	09:00	DM	07/19/13	AQ	Ground Water	SS61-MW25-A
FA6583-7F	07/18/13	09:00	DM	07/19/13	AQ	Groundwater Filtered	SS61-MW25-A
FA6583-8	07/18/13	00:00	DM	07/19/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA6583

Site: Holloman AFB; SS61 VCM **Report Date** 8/1/2013 7:39:29 PM

4 Samples and 4 Trip Blanks were collected between 07/17/2013 and 07/18/2013 and were received at Accutest SE on 07/19/2013 properly preserved, at 3 Deg. C and intact. These Samples received an Accutest job number of FA6583. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VI117

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6583-7MS, FA6583-7MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acrolein are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, Acrolein are outside control limits. Probable cause is due to matrix interference.

FA6583-1 for Acrolein: Associated BS recovery outside control limits.

FA6583-2 for Acrolein: Associated BS recovery outside control limits.

FA6583-3 for Acrolein: Associated BS recovery outside control limits.

FA6583-4 for Acrolein: Associated BS recovery outside control limits.

FA6583-5 for Acrolein: Associated BS recovery outside control limits.

FA6583-6 for Acrolein: Associated BS recovery outside control limits.

FA6583-7 for Acrolein: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VI118

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6536-1MS, FA6536-1MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acrolein are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated sample; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 1,1,2-Trichloroethane, 2-Chloroethyl vinyl ether, Acrolein, Benzene are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,1,2-Trichloroethane, 2-Chloroethyl vinyl ether, Acrolein are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for 1,1-Dichloroethylene, 2-Chloroethyl vinyl ether are outside control limits for sample FA6536-1MSD. Probable cause is due to sample non-homogeneity.

FA6583-8 for Acrolein: Associated BS recovery outside control limits.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP47914

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6562-5MS, FA6562-5MSD were used as the QC samples indicated.

RPD(s) for MSD for Benzidine are outside control limits for sample OP47914-MSD. Probable cause is due to sample non-homogeneity.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD5021

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6638-1MS, FA6638-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP47901

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6510-3MS, FA6510-3MSD were used as the QC samples indicated.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP25542

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6464-1DUP, FA6464-1MS, FA6464-1MSD, FA6464-1PS, FA6464-1SDL were used as the QC samples for metals.

MP25542-PS1 for Manganese: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP22134

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6522-3MS, FA6522-3MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

Matrix Spike Recovery(s) for Sulfate are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

FA6583-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA6583-3 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Matrix: AQ **Batch ID:** GP22138

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6575-8MS, FA6575-8MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA6583-5 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA6583-7 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP22208

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6722-11MS, FA6722-11MSD were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP22158

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6510-1MS, FA6510-1MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN56849

All method blanks for this batch meet method specific criteria.

Sample(s) FA6583-1DUP was used as the QC samples for Iron, Ferrous.

FA6583-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA6583-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA6583-5 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA6583-7 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R31431

FA6583-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R31432

FA6583-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R31433

FA6583-5 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R31434

FA6583-7 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN56919

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6498-17DUP was used as the QC samples for Solids, Total Dissolved.

Matrix: AQ **Batch ID:** GN56969

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6621-4DUP was used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP22135

All method blanks for this batch meet method specific criteria.

Sample(s) FA6573-1DUP was used as the QC samples for BOD, 5 Day.

The following samples were prepped outside of holding time for method SM19 5210B: FA6583-1

Blank Spike Recovery(s) for BOD, 5 Day are outside control limits.

RPD(s) for Duplicate for BOD, 5 Day are outside control limits for sample GP22135-D1. RPD acceptable due to low duplicate and sample concentrations.

FA6583-1 for BOD, 5 Day: Estimated Value. Associated BS recovery outside control limits.

FA6583-3 for BOD, 5 Day: Estimated Value. Associated BS recovery outside control limits.

FA6583-5 for BOD, 5 Day: Estimated Value. Associated BS recovery outside control limits.

FA6583-7 for BOD, 5 Day: Estimated Value. Associated BS recovery outside control limits.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP22147

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6573-1MS, FA6573-1MSD were used as the QC samples for Chemical Oxygen Demand.

Matrix: AQ **Batch ID:** GP22154

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA6583-1MS, FA6583-1MSD were used as the QC samples for Chemical Oxygen Demand.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: August 1, 2013

Lovelie Metzgar, QA Officer (signature on file)

Memo

To: Marcia Olive, Bhate Environmental
From: Svetlana Izosimova, QAO, Accutest Laboratories Southeast, Inc.
Re: Hold time exceedance for BOD.
Date: August 02, 2013

Dear Ms. Olive:

Between July 17 and July 18, 2013, Bhate Environmental collected several groundwater samples. These samples were received at Accutest Laboratories Southeast on 7/19/2013 and were assigned SDG# FA6583. Two of these samples were received at the end of 48-hour hold time for BOD analysis.

In order to begin BOD analysis, samples needed to equilibrate to room temperature and pH measured and adjusted as prescribed by the method. As a result, hold time for sample -1 was exceeded by 10 minutes.

QA Officer has reviewed project history and these results are in line with established historical record.

Sincerely,

Svetlana Izosimova, Ph.D., QA Officer

Summary of Hits

Job Number: FA6583
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/17/13 thru 07/18/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA6583-1	**SS61-MW21**					
Benzene		113	2.5	0.53	ug/l	SW846 8260B
sec-Butylbenzene		1.1 J	2.5	0.53	ug/l	SW846 8260B
tert-Butylbenzene		2.1 J	2.5	0.73	ug/l	SW846 8260B
Chlorobenzene		1.7 J	2.5	0.50	ug/l	SW846 8260B
m-Dichlorobenzene		2.3 J	2.5	0.64	ug/l	SW846 8260B
o-Dichlorobenzene		6.5	2.5	0.54	ug/l	SW846 8260B
p-Dichlorobenzene		2.8	2.5	0.50	ug/l	SW846 8260B
Ethylbenzene		89.6	2.5	0.73	ug/l	SW846 8260B
Isopropylbenzene		406	5.0	1.0	ug/l	SW846 8260B
Methylene chloride		10.8 J	13	5.0	ug/l	SW846 8260B
n-Propylbenzene		11.2	2.5	0.57	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		6.1	5.0	0.50	ug/l	SW846 8260B
Toluene		4.2	2.5	0.50	ug/l	SW846 8260B
m,p-Xylene		30.5	5.0	0.74	ug/l	SW846 8260B
o-Xylene		2.4 J	2.5	0.50	ug/l	SW846 8260B
1,2-Dichlorobenzene		4.0 J	4.8	0.65	ug/l	SW846 8270D
1,3-Dichlorobenzene		1.3 J	4.8	0.75	ug/l	SW846 8270D
1,4-Dichlorobenzene		1.6 J	4.8	0.67	ug/l	SW846 8270D
TPH-GRO (C6-C10)		1.20	0.20	0.10	mg/l	SW846 8015C
TPH (C10-C22)		0.208 J	0.24	0.096	mg/l	SW846 8015C
Iron		480	300	29	ug/l	EPA 200.7
Manganese		1420	15	0.70	ug/l	EPA 200.7
BOD, 5 Day [a]		18.0	8.0	8.0	mg/l	SM19 5210B
Chemical Oxygen Demand		40.3	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		5.2	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [b]		0.21 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [c]		0.27	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		0.98	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		6360	500	50	mg/l	SM19 2540C
Sulfate		3700	100	30	mg/l	EPA 300/SW846 9056A
FA6583-1F	**SS61-MW21**					
Manganese		1300	15	0.70	ug/l	EPA 200.7
FA6583-2	**TRIP BLANK**					
Toluene		0.22 J	1.0	0.20	ug/l	SW846 8260B
FA6583-3	**SS61-MW23**					
TPH (C10-C22)		0.150 J	0.24	0.096	mg/l	SW846 8015C
Iron		2850	300	29	ug/l	EPA 200.7

Summary of Hits

Job Number: FA6583
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/17/13 thru 07/18/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Manganese		288	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		12.6 J	20	5.3	mg/l	SM19 5220C
Iron, Ferric [b]		2.9	0.40	0.059	mg/l	SM18 3500FED M
Nitrogen, Ammonia		0.040 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Nitrate [d]		2.1 J	2.5	1.3	mg/l	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl		1.1	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5430	500	50	mg/l	SM19 2540C
Sulfate		3290	100	30	mg/l	EPA 300/SW846 9056A
FA6583-3F	**SS61-MW23**					
Manganese		215	15	0.70	ug/l	EPA 200.7
FA6583-4	**TRIP BLANK**					
Toluene		0.45 J	1.0	0.20	ug/l	SW846 8260B
FA6583-5	**SS61-MW25**					
Benzene		2930	50	11	ug/l	SW846 8260B
Chlorobenzene		20.1 J	50	10	ug/l	SW846 8260B
m-Dichlorobenzene		87.0	50	13	ug/l	SW846 8260B
o-Dichlorobenzene		359	50	11	ug/l	SW846 8260B
p-Dichlorobenzene		136	50	10	ug/l	SW846 8260B
Ethylbenzene		66.6	50	15	ug/l	SW846 8260B
Isopropylbenzene		1270	50	10	ug/l	SW846 8260B
Methylene chloride		181 J	250	100	ug/l	SW846 8260B
n-Propylbenzene		35.3 J	50	11	ug/l	SW846 8260B
Toluene		10.3 J	50	10	ug/l	SW846 8260B
2,4-Dichlorophenol		1.8 J	4.8	0.67	ug/l	SW846 8270D
Phenol		2.5 J	4.8	0.53	ug/l	SW846 8270D
1,2-Dichlorobenzene		216	19	2.6	ug/l	SW846 8270D
1,3-Dichlorobenzene		60.4	4.8	0.75	ug/l	SW846 8270D
1,4-Dichlorobenzene		79.9	4.8	0.67	ug/l	SW846 8270D
Dibenzofuran		2.1 J	4.8	0.72	ug/l	SW846 8270D
Naphthalene		0.65 J	4.8	0.61	ug/l	SW846 8270D
TPH-GRO (C6-C10)		7.55	2.0	1.0	mg/l	SW846 8015C
TPH (C10-C22)		4.49	0.96	0.38	mg/l	SW846 8015C
TPH (> C22-C36)		0.382 J	0.96	0.38	mg/l	SW846 8015C
Iron		1100	300	29	ug/l	EPA 200.7
Manganese		638	15	0.70	ug/l	EPA 200.7
BOD, 5 Day [a]		27.2	13	13	mg/l	SM19 5210B
Chemical Oxygen Demand		50.3	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		5.5	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [b]		0.71	0.40	0.059	mg/l	SM18 3500FED M

Summary of Hits

Job Number: FA6583
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/17/13 thru 07/18/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Iron, Ferrous [c]		0.39	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		1.4	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5980	500	50	mg/l	SM19 2540C
Sulfate		3570	100	30	mg/l	EPA 300/SW846 9056A
FA6583-5F	**SS61-MW25**					
Manganese		609	15	0.70	ug/l	EPA 200.7
FA6583-6	**TRIP BLANK**					
Toluene		0.32 J	1.0	0.20	ug/l	SW846 8260B
FA6583-7	**SS61-MW25-A**					
Benzene		2850	50	11	ug/l	SW846 8260B
sec-Butylbenzene		4.8 J	10	2.1	ug/l	SW846 8260B
tert-Butylbenzene		7.3 J	10	2.9	ug/l	SW846 8260B
Chlorobenzene		16.1	10	2.0	ug/l	SW846 8260B
1,2-Dichloroethane		2.7 J	10	2.2	ug/l	SW846 8260B
m-Dichlorobenzene		97.5	10	2.5	ug/l	SW846 8260B
o-Dichlorobenzene		371	10	2.2	ug/l	SW846 8260B
p-Dichlorobenzene		129	10	2.0	ug/l	SW846 8260B
Ethylbenzene		67.3	10	2.9	ug/l	SW846 8260B
Isopropylbenzene		1280	50	10	ug/l	SW846 8260B
Methylene chloride		33.8 J	50	20	ug/l	SW846 8260B
n-Propylbenzene		32.3	10	2.3	ug/l	SW846 8260B
Toluene		2.5 J	10	2.0	ug/l	SW846 8260B
m,p-Xylene		3.6 J	20	3.0	ug/l	SW846 8260B
2,4-Dichlorophenol		2.0 J	4.9	0.68	ug/l	SW846 8270D
Phenol		3.9 J	4.9	0.53	ug/l	SW846 8270D
1,2-Dichlorobenzene		215	19	2.6	ug/l	SW846 8270D
1,3-Dichlorobenzene		61.5	4.9	0.75	ug/l	SW846 8270D
1,4-Dichlorobenzene		81.1	4.9	0.67	ug/l	SW846 8270D
Dibenzofuran		2.5 J	4.9	0.72	ug/l	SW846 8270D
Naphthalene		0.63 J	4.9	0.62	ug/l	SW846 8270D
TPH-GRO (C6-C10)		7.43	2.0	1.0	mg/l	SW846 8015C
TPH (C10-C22)		2.01	0.96	0.38	mg/l	SW846 8015C
Iron		1140	300	29	ug/l	EPA 200.7
Manganese		661	15	0.70	ug/l	EPA 200.7
BOD, 5 Day [a]		28.0	20	20	mg/l	SM19 5210B
Chemical Oxygen Demand		55.8	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		6.0	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [b]		0.26 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [c]		0.88	0.10	0.030	mg/l	SM18 3500FED

Summary of Hits

Job Number: FA6583
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 07/17/13 thru 07/18/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Nitrogen, Total Kjeldahl		1.4	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5960	500	50	mg/l	SM19 2540C
Sulfate		3640	100	30	mg/l	EPA 300/SW846 9056A
FA6583-7F	**SS61-MW25-A**					
Manganese		639	15	0.70	ug/l	EPA 200.7
FA6583-8	**TRIP BLANK**					

No hits reported in this sample.

(a) Estimated Value. Associated BS recovery outside control limits.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I13142.D	2.5	07/22/13	WV	n/a	n/a	VI117
Run #2	I13154.D	5	07/22/13	WV	n/a	n/a	VI117

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	63	25	ug/l	
107-02-8	Acrolein [a]	ND	50	17	ug/l	
107-13-1	Acrylonitrile	ND	25	5.0	ug/l	
71-43-2	Benzene	113	2.5	0.53	ug/l	
108-86-1	Bromobenzene	ND	2.5	0.55	ug/l	
74-97-5	Bromochloromethane	ND	2.5	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	2.5	0.50	ug/l	
75-25-2	Bromoform	ND	2.5	0.86	ug/l	
104-51-8	n-Butylbenzene	ND	2.5	0.50	ug/l	
135-98-8	sec-Butylbenzene	1.1	2.5	0.53	ug/l	J
98-06-6	tert-Butylbenzene	2.1	2.5	0.73	ug/l	J
108-90-7	Chlorobenzene	1.7	2.5	0.50	ug/l	J
75-00-3	Chloroethane	ND	5.0	1.3	ug/l	
67-66-3	Chloroform	ND	2.5	0.66	ug/l	
95-49-8	o-Chlorotoluene	ND	2.5	0.53	ug/l	
106-43-4	p-Chlorotoluene	ND	2.5	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	13	3.2	ug/l	
75-15-0	Carbon disulfide	ND	5.0	1.2	ug/l	
56-23-5	Carbon tetrachloride	ND	2.5	0.78	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.5	0.54	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.5	0.50	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.5	0.62	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.5	0.75	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.5	0.56	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.5	0.66	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.5	0.67	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.5	0.61	ug/l	
124-48-1	Dibromochloromethane	ND	2.5	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.3	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.5	0.59	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	2.3	2.5	0.64	ug/l	J
95-50-1	o-Dichlorobenzene	6.5	2.5	0.54	ug/l	
106-46-7	p-Dichlorobenzene	2.8	2.5	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.5	0.57	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.52	ug/l	
100-41-4	Ethylbenzene	89.6	2.5	0.73	ug/l	
591-78-6	2-Hexanone	ND	25	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/l	
110-54-3	Hexane	ND	5.0	2.2	ug/l	
98-82-8	Isopropylbenzene	406 [b]	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.5	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	13	5.6	ug/l	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/l	
74-87-3	Methyl chloride	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	10.8	13	5.0	ug/l	J
78-93-3	Methyl ethyl ketone	ND	13	7.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	0.53	ug/l	
91-20-3	Naphthalene	ND	13	2.5	ug/l	
103-65-1	n-Propylbenzene	11.2	2.5	0.57	ug/l	
100-42-5	Styrene	ND	2.5	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.58	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	0.60	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	1.3	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.4	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	1.3	ug/l	
95-63-6	1,2,4-Trimethylbenzene	6.1	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	2.5	0.80	ug/l	
108-88-3	Toluene	4.2	2.5	0.50	ug/l	
79-01-6	Trichloroethylene	ND	2.5	0.79	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	1.3	ug/l	
75-01-4	Vinyl chloride	ND	2.5	1.1	ug/l	
108-05-4	Vinyl Acetate	ND	25	7.9	ug/l	
	m,p-Xylene	30.5	5.0	0.74	ug/l	
95-47-6	o-Xylene	2.4	2.5	0.50	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	113%	79-125%
2037-26-5	Toluene-D8	98%	100%	85-112%
460-00-4	4-Bromofluorobenzene	114%	116%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L064785.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	ND	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	4.0	4.8	0.65	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	1.3	4.8	0.75	ug/l	J
106-46-7	1,4-Dichlorobenzene	1.6	4.8	0.67	ug/l	J
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	ND	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		14-67%
4165-62-2	Phenol-d5	32%		10-50%
118-79-6	2,4,6-Tribromophenol	70%		33-118%
4165-60-0	Nitrobenzene-d5	57%		42-108%
321-60-8	2-Fluorobiphenyl	55%		40-106%
1718-51-0	Terphenyl-d14	73%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123089.D	2	07/22/13	CP	n/a	n/a	GCD5021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.20	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	116%		70-131%
98-08-8	aaa-Trifluorotoluene	85%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49501.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.208	0.24	0.096	mg/l	J
	TPH (> C22-C36)	ND	0.24	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	480	300	29	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	1420	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	18.0	8.0	8.0	mg/l	4	07/19/13 15:00	HH	SM19 5210B
Chemical Oxygen Demand	40.3	20	5.3	mg/l	1	07/24/13 09:00	LE	SM19 5220C
Hydrogen Sulfide	5.2	1.0	0.50	mg/l	1	07/20/13 07:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.21 J	0.40	0.059	mg/l	1	07/24/13 17:42	LM	SM18 3500FED M
Iron, Ferrous [c]	0.27	0.10	0.030	mg/l	1	07/19/13 14:27	MG	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	08/01/13 12:19	VK	EPA 350.1
Nitrogen, Nitrate [d]	2.5 U	5.0	2.5	mg/l	50	07/19/13 14:23	AC	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	0.98	0.53	0.17	mg/l	1	07/25/13 12:51	MG	EPA 351.2
Solids, Total Dissolved	6360	500	50	mg/l	5	07/23/13 17:00	KC	SM19 2540C
Sulfate	3700	100	30	mg/l	50	07/19/13 14:23	AC	EPA 300/SW846 9056A

(a) Estimated Value. Associated BS recovery outside control limits.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA6583-1F	**Date Sampled:**	07/17/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	1300	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-2	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I13145.D	1	07/22/13	WV	n/a	n/a	VI117
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-2	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.22	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-2	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	110%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I13146.D	1	07/22/13	WV	n/a	n/a	VI117
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	110%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L064786.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	49	9.8	ug/l	
95-57-8	2-Chlorophenol	ND	4.9	0.69	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.9	0.79	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.9	0.69	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.9	0.75	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.8	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.9	0.71	ug/l	
	3&4-Methylphenol	ND	4.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	4.9	0.66	ug/l	
100-02-7	4-Nitrophenol	ND	25	4.9	ug/l	
87-86-5	Pentachlorophenol	ND	25	4.9	ug/l	
108-95-2	Phenol	ND	4.9	0.54	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.9	0.88	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.9	0.76	ug/l	
83-32-9	Acenaphthene	ND	4.9	0.69	ug/l	
208-96-8	Acenaphthylene	ND	4.9	0.68	ug/l	
62-53-3	Aniline	ND	4.9	0.76	ug/l	
120-12-7	Anthracene	ND	4.9	0.73	ug/l	
92-87-5	Benzidine	ND	25	4.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	0.54	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	0.56	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	0.74	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	0.65	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	0.65	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.9	0.77	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.9	0.70	ug/l	
100-51-6	Benzyl Alcohol	ND	4.9	0.98	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.9	0.71	ug/l	
106-47-8	4-Chloroaniline	ND	4.9	0.67	ug/l	
86-74-8	Carbazole	ND	4.9	0.51	ug/l	
218-01-9	Chrysene	ND	4.9	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.9	0.68	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.9	0.70	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.9	0.77	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.9	0.85	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.9	0.67	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.9	0.63	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.9	0.76	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.9	0.68	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.9	0.67	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.9	0.79	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.9	0.72	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	0.57	ug/l	
132-64-9	Dibenzofuran	ND	4.9	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.9	0.98	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.9	0.98	ug/l	
84-66-2	Diethyl phthalate	ND	4.9	0.98	ug/l	
131-11-3	Dimethyl phthalate	ND	4.9	0.79	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.9	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.9	0.58	ug/l	
86-73-7	Fluorene	ND	4.9	0.75	ug/l	
118-74-1	Hexachlorobenzene	ND	4.9	0.67	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.9	0.94	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.9	0.78	ug/l	
67-72-1	Hexachloroethane	ND	4.9	0.73	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	0.56	ug/l	
78-59-1	Isophorone	ND	4.9	0.63	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	0.69	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	0.67	ug/l	
88-74-4	2-Nitroaniline	ND	4.9	0.74	ug/l	
99-09-2	3-Nitroaniline	ND	4.9	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.9	0.95	ug/l	
91-20-3	Naphthalene	ND	4.9	0.62	ug/l	
98-95-3	Nitrobenzene	ND	4.9	0.71	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.9	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.9	0.83	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.9	0.98	ug/l	
85-01-8	Phenanthrene	ND	4.9	0.69	ug/l	
129-00-0	Pyrene	ND	4.9	0.67	ug/l	
110-86-1	Pyridine	ND	9.8	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.60	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		14-67%
4165-62-2	Phenol-d5	40%		10-50%
118-79-6	2,4,6-Tribromophenol	83%		33-118%
4165-60-0	Nitrobenzene-d5	87%		42-108%
321-60-8	2-Fluorobiphenyl	87%		40-106%
1718-51-0	Terphenyl-d14	79%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123090.D	1	07/22/13	CP	n/a	n/a	GCD5021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		70-131%
98-08-8	aaa-Trifluorotoluene	91%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49502.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.150	0.24	0.096	mg/l	J
	TPH (> C22-C36)	ND	0.24	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	2850	300	29	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	288	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3	**Date Sampled:**	07/17/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	4.0 U	4.0	4.0	mg/l	2	07/19/13 15:00	HH	SM19 5210B
Chemical Oxygen Demand	12.6 J	20	5.3	mg/l	1	07/24/13 09:00	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	07/20/13 07:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	2.9	0.40	0.059	mg/l	1	07/24/13 17:47	LM	SM18 3500FED M
Iron, Ferrous [c]	0.030 U	0.10	0.030	mg/l	1	07/19/13 14:27	MG	SM18 3500FED
Nitrogen, Ammonia	0.040 J	0.10	0.030	mg/l	1	08/01/13 12:20	VK	EPA 350.1
Nitrogen, Nitrate [d]	2.1 J	2.5	1.3	mg/l	25	07/19/13 15:27	AC	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.1	0.53	0.17	mg/l	1	07/25/13 12:50	MG	EPA 351.2
Solids, Total Dissolved	5430	500	50	mg/l	5	07/23/13 17:00	KC	SM19 2540C
Sulfate	3290	100	30	mg/l	50	07/22/13 23:42	AC	EPA 300/SW846 9056A

(a) Estimated Value. Associated BS recovery outside control limits.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA6583-3F	**Date Sampled:**	07/17/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	215	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-4	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I13147.D	1	07/22/13	WV	n/a	n/a	VI117
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-4	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.45	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-4	**Date Sampled:**	07/17/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	109%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I13143.D	50	07/22/13	WV	n/a	n/a	VI117
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1300	500	ug/l	
107-02-8	Acrolein [a]	ND	1000	350	ug/l	
107-13-1	Acrylonitrile	ND	500	100	ug/l	
71-43-2	Benzene	2930	50	11	ug/l	
108-86-1	Bromobenzene	ND	50	11	ug/l	
74-97-5	Bromochloromethane	ND	50	11	ug/l	
75-27-4	Bromodichloromethane	ND	50	10	ug/l	
75-25-2	Bromoform	ND	50	17	ug/l	
104-51-8	n-Butylbenzene	ND	50	10	ug/l	
135-98-8	sec-Butylbenzene	ND	50	11	ug/l	
98-06-6	tert-Butylbenzene	ND	50	15	ug/l	
108-90-7	Chlorobenzene	20.1	50	10	ug/l	J
75-00-3	Chloroethane	ND	100	25	ug/l	
67-66-3	Chloroform	ND	50	13	ug/l	
95-49-8	o-Chlorotoluene	ND	50	11	ug/l	
106-43-4	p-Chlorotoluene	ND	50	10	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	250	64	ug/l	
75-15-0	Carbon disulfide	ND	100	25	ug/l	
56-23-5	Carbon tetrachloride	ND	50	16	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	11	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	10	ug/l	
563-58-6	1,1-Dichloropropene	ND	50	12	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	36	ug/l	
106-93-4	1,2-Dibromoethane	ND	50	15	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	11	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	13	ug/l	
142-28-9	1,3-Dichloropropane	ND	50	13	ug/l	
594-20-7	2,2-Dichloropropane	ND	50	12	ug/l	
124-48-1	Dibromochloromethane	ND	50	10	ug/l	
75-71-8	Dichlorodifluoromethane	ND	100	25	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	50	12	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	11	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	87.0	50	13	ug/l	
95-50-1	o-Dichlorobenzene	359	50	11	ug/l	
106-46-7	p-Dichlorobenzene	136	50	10	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	11	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	10	ug/l	
100-41-4	Ethylbenzene	66.6	50	15	ug/l	
591-78-6	2-Hexanone	ND	500	100	ug/l	
87-68-3	Hexachlorobutadiene	ND	100	25	ug/l	
110-54-3	Hexane	ND	100	44	ug/l	
98-82-8	Isopropylbenzene	1270	50	10	ug/l	
99-87-6	p-Isopropyltoluene	ND	50	10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	250	110	ug/l	
74-83-9	Methyl bromide	ND	100	39	ug/l	
74-87-3	Methyl chloride	ND	100	25	ug/l	
74-95-3	Methylene bromide	ND	100	17	ug/l	
75-09-2	Methylene chloride	181	250	100	ug/l	J
78-93-3	Methyl ethyl ketone	ND	250	160	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	50	11	ug/l	
91-20-3	Naphthalene	ND	250	50	ug/l	
103-65-1	n-Propylbenzene	35.3	50	11	ug/l	J
100-42-5	Styrene	ND	50	10	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	12	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	10	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	10	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	50	25	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	100	28	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	25	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	100	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	100	10	ug/l	
127-18-4	Tetrachloroethylene	ND	50	16	ug/l	
108-88-3	Toluene	10.3	50	10	ug/l	J
79-01-6	Trichloroethylene	ND	50	16	ug/l	
75-69-4	Trichlorofluoromethane	ND	100	25	ug/l	
75-01-4	Vinyl chloride	ND	50	22	ug/l	
108-05-4	Vinyl Acetate	ND	500	160	ug/l	
	m,p-Xylene	ND	100	15	ug/l	
95-47-6	o-Xylene	ND	50	10	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	112%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L064787.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265
Run #2	L064810.D	4	07/25/13	NAF	07/24/13	OP47914	SL3266

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2	1040 ml	1.0 ml

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	48	9.6	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	1.8	4.8	0.67	ug/l	J
105-67-9	2,4-Dimethylphenol	ND	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.69	ug/l	
	3&4-Methylphenol	ND	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.8	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.8	ug/l	
108-95-2	Phenol	2.5	4.8	0.53	ug/l	J
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.75	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.67	ug/l	
62-53-3	Aniline	ND	4.8	0.75	ug/l	
120-12-7	Anthracene	ND	4.8	0.72	ug/l	
92-87-5	Benzidine	ND	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.66	ug/l	
86-74-8	Carbazole	ND	4.8	0.50	ug/l	
218-01-9	Chrysene	ND	4.8	0.56	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	216 [a]	19	2.6	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	60.4	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	79.9	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	2.1	4.8	0.72	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.56	ug/l	
86-73-7	Fluorene	ND	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.55	ug/l	
78-59-1	Isophorone	ND	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.93	ug/l	
91-20-3	Naphthalene	0.65	4.8	0.61	ug/l	J
98-95-3	Nitrobenzene	ND	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.68	ug/l	
129-00-0	Pyrene	ND	4.8	0.65	ug/l	
110-86-1	Pyridine	ND	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.58	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%	42%	14-67%
4165-62-2	Phenol-d5	34%	37%	10-50%
118-79-6	2,4,6-Tribromophenol	82%	82%	33-118%
4165-60-0	Nitrobenzene-d5	77%	79%	42-108%
321-60-8	2-Fluorobiphenyl	73%	83%	40-106%
1718-51-0	Terphenyl-d14	73%	85%	39-121%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123095.D	20	07/22/13	CP	n/a	n/a	GCD5021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	7.55	2.0	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	124%		70-131%
98-08-8	aaa-Trifluorotoluene	100%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49522.D	4	07/31/13	SJL	07/23/13	OP47901	GLL1870
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.49	0.96	0.38	mg/l	
	TPH (> C22-C36)	0.382	0.96	0.38	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	121%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	1100	300	29	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	638	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	27.2	13	13	mg/l	7	07/19/13 15:00	HH	SM19 5210B
Chemical Oxygen Demand	50.3	20	5.3	mg/l	1	07/24/13 09:00	LE	SM19 5220C
Hydrogen Sulfide	5.5	1.0	0.50	mg/l	1	07/20/13 07:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.71	0.40	0.059	mg/l	1	07/24/13 17:52	LM	SM18 3500FED M
Iron, Ferrous [c]	0.39	0.10	0.030	mg/l	1	07/19/13 14:27	MG	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	08/01/13 12:23	VK	EPA 350.1
Nitrogen, Nitrate [d]	2.5 U	5.0	2.5	mg/l	50	07/20/13 06:13	AC	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.4	0.53	0.17	mg/l	1	07/25/13 12:42	MG	EPA 351.2
Solids, Total Dissolved	5980	500	50	mg/l	5	07/25/13 14:50	KC	SM19 2540C
Sulfate	3570	100	30	mg/l	50	07/20/13 06:13	AC	EPA 300/SW846 9056A

(a) Estimated Value. Associated BS recovery outside control limits.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA6583-5F	**Date Sampled:**	07/18/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	609	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-6	**Date Sampled:**	07/18/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I13148.D	1	07/22/13	WV	n/a	n/a	VI117
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-6	**Date Sampled:**	07/18/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.32	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-6	**Date Sampled:**	07/18/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I13144.D	10	07/22/13	WV	n/a	n/a	VI117
Run #2	I13155.D	50	07/22/13	WV	n/a	n/a	VI117

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	100	ug/l	
107-02-8	Acrolein [a]	ND	200	69	ug/l	
107-13-1	Acrylonitrile	ND	100	20	ug/l	
71-43-2	Benzene	2850 [b]	50	11	ug/l	
108-86-1	Bromobenzene	ND	10	2.2	ug/l	
74-97-5	Bromochloromethane	ND	10	2.3	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.0	ug/l	
75-25-2	Bromoform	ND	10	3.4	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.0	ug/l	
135-98-8	sec-Butylbenzene	4.8	10	2.1	ug/l	J
98-06-6	tert-Butylbenzene	7.3	10	2.9	ug/l	J
108-90-7	Chlorobenzene	16.1	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	5.0	ug/l	
67-66-3	Chloroform	ND	10	2.6	ug/l	
95-49-8	o-Chlorotoluene	ND	10	2.1	ug/l	
106-43-4	p-Chlorotoluene	ND	10	2.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	50	13	ug/l	
75-15-0	Carbon disulfide	ND	20	4.9	ug/l	
56-23-5	Carbon tetrachloride	ND	10	3.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	2.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	2.5	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	7.1	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	3.0	ug/l	
107-06-2	1,2-Dichloroethane	2.7	10	2.2	ug/l	J
78-87-5	1,2-Dichloropropane	ND	10	2.6	ug/l	
142-28-9	1,3-Dichloropropane	ND	10	2.7	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	2.5	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	5.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	10	2.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.2	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	97.5	10	2.5	ug/l	
95-50-1	o-Dichlorobenzene	371	10	2.2	ug/l	
106-46-7	p-Dichlorobenzene	129	10	2.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	67.3	10	2.9	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	5.0	ug/l	
110-54-3	Hexane	ND	20	8.8	ug/l	
98-82-8	Isopropylbenzene	1280 [b]	50	10	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	50	23	ug/l	
74-83-9	Methyl bromide	ND	20	7.9	ug/l	
74-87-3	Methyl chloride	ND	20	5.0	ug/l	
74-95-3	Methylene bromide	ND	20	3.4	ug/l	
75-09-2	Methylene chloride	33.8	50	20	ug/l	J
78-93-3	Methyl ethyl ketone	ND	50	31	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.1	ug/l	
91-20-3	Naphthalene	ND	50	10	ug/l	
103-65-1	n-Propylbenzene	32.3	10	2.3	ug/l	
100-42-5	Styrene	ND	10	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	2.3	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	5.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	5.6	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	2.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	2.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	3.2	ug/l	
108-88-3	Toluene	2.5	10	2.0	ug/l	J
79-01-6	Trichloroethylene	ND	10	3.1	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	4.4	ug/l	
108-05-4	Vinyl Acetate	ND	100	31	ug/l	
	m,p-Xylene	3.6	20	3.0	ug/l	J
95-47-6	o-Xylene	ND	10	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	111%	79-125%
2037-26-5	Toluene-D8	98%	98%	85-112%
460-00-4	4-Bromofluorobenzene	111%	116%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L064788.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265
Run #2	L064811.D	4	07/25/13	NAF	07/24/13	OP47914	SL3266

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2	1030 ml	1.0 ml

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	49	9.7	ug/l	
95-57-8	2-Chlorophenol	ND	4.9	0.69	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.9	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	2.0	4.9	0.68	ug/l	J
105-67-9	2,4-Dimethylphenol	ND	4.9	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.9	0.70	ug/l	
	3&4-Methylphenol	ND	4.9	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.9	0.66	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.9	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.9	ug/l	
108-95-2	Phenol	3.9	4.9	0.53	ug/l	J
95-95-4	2,4,5-Trichlorophenol	ND	4.9	0.87	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.9	0.76	ug/l	
83-32-9	Acenaphthene	ND	4.9	0.68	ug/l	
208-96-8	Acenaphthylene	ND	4.9	0.67	ug/l	
62-53-3	Aniline	ND	4.9	0.76	ug/l	
120-12-7	Anthracene	ND	4.9	0.73	ug/l	
92-87-5	Benzidine	ND	24	4.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	0.53	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	0.65	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.9	0.77	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.9	0.69	ug/l	
100-51-6	Benzyl Alcohol	ND	4.9	0.97	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.9	0.71	ug/l	
106-47-8	4-Chloroaniline	ND	4.9	0.67	ug/l	
86-74-8	Carbazole	ND	4.9	0.51	ug/l	
218-01-9	Chrysene	ND	4.9	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.9	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.9	0.70	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.9	0.77	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.9	0.85	ug/l	
95-50-1	1,2-Dichlorobenzene	215 [a]	19	2.6	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.9	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	61.5	4.9	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	81.1	4.9	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.9	0.67	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.9	0.78	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.9	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	0.57	ug/l	
132-64-9	Dibenzofuran	2.5	4.9	0.72	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	4.9	0.97	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.9	0.97	ug/l	
84-66-2	Diethyl phthalate	ND	4.9	0.97	ug/l	
131-11-3	Dimethyl phthalate	ND	4.9	0.78	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.9	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.9	0.57	ug/l	
86-73-7	Fluorene	ND	4.9	0.74	ug/l	
118-74-1	Hexachlorobenzene	ND	4.9	0.67	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.9	0.93	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.9	0.77	ug/l	
67-72-1	Hexachloroethane	ND	4.9	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	0.56	ug/l	
78-59-1	Isophorone	ND	4.9	0.62	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	0.68	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	0.67	ug/l	
88-74-4	2-Nitroaniline	ND	4.9	0.73	ug/l	
99-09-2	3-Nitroaniline	ND	4.9	0.63	ug/l	
100-01-6	4-Nitroaniline	ND	4.9	0.94	ug/l	
91-20-3	Naphthalene	0.63	4.9	0.62	ug/l	J
98-95-3	Nitrobenzene	ND	4.9	0.70	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.9	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.9	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.9	0.97	ug/l	
85-01-8	Phenanthrene	ND	4.9	0.68	ug/l	
129-00-0	Pyrene	ND	4.9	0.66	ug/l	
110-86-1	Pyridine	ND	9.7	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.59	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%	52%	14-67%
4165-62-2	Phenol-d5	36%	35%	10-50%
118-79-6	2,4,6-Tribromophenol	79%	78%	33-118%
4165-60-0	Nitrobenzene-d5	78%	75%	42-108%
321-60-8	2-Fluorobiphenyl	75%	79%	40-106%
1718-51-0	Terphenyl-d14	77%	87%	39-121%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD123096.D	20	07/22/13	CP	n/a	n/a	GCD5021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	7.43	2.0	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	108%		70-131%
98-08-8	aaa-Trifluorotoluene	87%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL49523.D	4	07/31/13	SJL	07/23/13	OP47901	GLL1870
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.01	0.96	0.38	mg/l	
	TPH (> C22-C36)	ND	0.96	0.38	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	1140	300	29	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	661	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7	**Date Sampled:**	07/18/13
Matrix:	AQ - Ground Water	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	28.0	20	20	mg/l	10	07/19/13 15:00	HH	SM19 5210B
Chemical Oxygen Demand	55.8	20	5.3	mg/l	1	07/23/13 10:40	LE	SM19 5220C
Hydrogen Sulfide	6.0	1.0	0.50	mg/l	1	07/20/13 07:40	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.26 J	0.40	0.059	mg/l	1	07/24/13 17:57	LM	SM18 3500FED M
Iron, Ferrous [c]	0.88	0.10	0.030	mg/l	1	07/19/13 14:27	MG	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	08/01/13 12:24	VK	EPA 350.1
Nitrogen, Nitrate [d]	2.5 U	5.0	2.5	mg/l	50	07/20/13 06:29	AC	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.4	0.53	0.17	mg/l	1	07/25/13 12:43	MG	EPA 351.2
Solids, Total Dissolved	5960	500	50	mg/l	5	07/25/13 14:50	KC	SM19 2540C
Sulfate	3640	100	30	mg/l	50	07/20/13 06:29	AC	EPA 300/SW846 9056A

(a) Estimated Value. Associated BS recovery outside control limits.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA6583-7F	**Date Sampled:**	07/18/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	07/19/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	639	15	0.70	ug/l	1	07/24/13	07/24/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA10917
(2) Prep QC Batch: MP25542

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-8	**Date Sampled:**	07/18/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I13170.D	1	07/23/13	WV	n/a	n/a	VI118
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein [a]	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-8	**Date Sampled:**	07/18/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA6583-8	**Date Sampled:**	07/18/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/19/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	96%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA6583

Page: 1 of 1
Project No: 9100133
COC Number(1): 07182013-01
LIMS Number:

bt.ate ENVIRONMENTAL CONSTRUCTION ENERGY
1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1	SS61-MW21	07/17/2013	1450	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				1
2	Trip Blank			-	TB	1	WQ	2	X													1
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. DMcNeil	7/18/13	1500	1. EX		
2. EX			2. [signature]	07/19/13	10:00
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7962 6004 1202
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

3.0

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA6583: Chain of Custody
Page 1 of 5

ENVIRONMENTAL CONSTRUCTION ENERGY
1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
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Fax: 205-918-4050

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07182013-02
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Coder ID
3	SS61-MW23	07/17/2013	1530	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				2
4	Trip Blank			-	TB	1	WQ	2	X													2
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	7/18/13	1500	1.		
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7962 6004 0949
Analytical Lab: Accutest
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

ENVIRONMENTAL CONSTRUCTION ENERGY
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Fax: 205-918-4050

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07182013-03
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
SS61-MW25	07/18/2013	0900	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				3
Trip Blank			-	TB	1	WQ	2	X													3
			-																		
			-																		
			-																		
			-																		
			-																		
			-																		
			-																		

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

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	7/18/13	1500	1.		
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest
Lab Recipient:
Shipped No.:
Airbill Number: 7962 6004 1007
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

ENVIRONMENTAL CONSTRUCTION ENERGY
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Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 07182013-04
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q5)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zachary Beck

	Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
7	SS61-MW25-A	07/18/2013	0900	-	FD	1	WG	18	X	X	X	X	X	X	X	X	X	X				4
8	Trip Blank			-	TB	1	WQ	2	X													4
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	7/18/13	1500	1.		
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 7962 6004 1349
Analytical Lab: Accutest Delivery Location: Orlando, FL
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA6583: Chain of Custody
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ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA6583 CLIENT: B-Hate PROJECT: SS-61 VCM

DATE/TIME RECEIVED: 07/19/13 10:00 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7962 6004 1202

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [x] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [x] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR 1.04
- [ ] OBSERVED TEMPS: 2.6
- [ ] CORRECTED TEMPS: 3.0

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE [signature] 07/19/13 REVIEWER SIGNATURE/DATE [signature] 7-19-13

NF 12/10 receipt confirmation 122910.xls

5.1 5

FA6583: Chain of Custody
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Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI117-MB	I13140.D	1	07/22/13	WV	n/a	n/a	VI117

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-1, FA6583-2, FA6583-3, FA6583-4, FA6583-5, FA6583-6, FA6583-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI117-MB	I13140.D	1	07/22/13	WV	n/a	n/a	VI117

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-1, FA6583-2, FA6583-3, FA6583-4, FA6583-5, FA6583-6, FA6583-7

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI117-MB	I13140.D	1	07/22/13	WV	n/a	n/a	VI117

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-1, FA6583-2, FA6583-3, FA6583-4, FA6583-5, FA6583-6, FA6583-7

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	110%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	110%	83-118%

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI118-MB	I13169.D	1	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI118-MB	I13169.D	1	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-8

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI118-MB	I13169.D	1	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-8

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	108%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	107%	83-118%

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI117-BS	I13141.D	1	07/22/13	WV	n/a	n/a	VI117

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-1, FA6583-2, FA6583-3, FA6583-4, FA6583-5, FA6583-6, FA6583-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	152	122	50-147
107-02-8	Acrolein	125	284	227*	31-154
107-13-1	Acrylonitrile	125	116	93	58-126
71-43-2	Benzene	25	28.4	114	81-122
108-86-1	Bromobenzene	25	26.4	106	80-121
74-97-5	Bromochloromethane	25	23.2	93	76-123
75-27-4	Bromodichloromethane	25	25.4	102	79-123
75-25-2	Bromoform	25	25.2	101	66-123
104-51-8	n-Butylbenzene	25	28.0	112	79-126
135-98-8	sec-Butylbenzene	25	31.3	125	83-133
98-06-6	tert-Butylbenzene	25	32.4	130	80-133
108-90-7	Chlorobenzene	25	29.0	116	82-124
75-00-3	Chloroethane	25	26.3	105	62-144
67-66-3	Chloroform	25	27.9	112	80-124
95-49-8	o-Chlorotoluene	25	30.6	122	81-127
106-43-4	p-Chlorotoluene	25	32.3	129	83-130
110-75-8	2-Chloroethyl vinyl ether	125	98.8	79	56-122
75-15-0	Carbon disulfide	25	36.2	145	66-148
56-23-5	Carbon tetrachloride	25	30.7	123	76-136
75-34-3	1,1-Dichloroethane	25	27.5	110	81-122
75-35-4	1,1-Dichloroethylene	25	31.6	126	78-137
563-58-6	1,1-Dichloropropene	25	30.9	124	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	23.7	95	64-123
106-93-4	1,2-Dibromoethane	25	27.0	108	75-120
107-06-2	1,2-Dichloroethane	25	26.9	108	75-125
78-87-5	1,2-Dichloropropane	25	28.7	115	76-124
142-28-9	1,3-Dichloropropane	25	26.7	107	80-118
594-20-7	2,2-Dichloropropane	25	32.0	128	74-139
124-48-1	Dibromochloromethane	25	25.6	102	78-122
75-71-8	Dichlorodifluoromethane	25	26.1	104	42-167
156-59-2	cis-1,2-Dichloroethylene	25	28.4	114	78-120
10061-01-5	cis-1,3-Dichloropropene	25	28.0	112	75-118
541-73-1	m-Dichlorobenzene	25	29.4	118	84-125
95-50-1	o-Dichlorobenzene	25	28.4	114	82-124
106-46-7	p-Dichlorobenzene	25	26.0	104	78-120
156-60-5	trans-1,2-Dichloroethylene	25	29.1	116	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI117-BS	I13141.D	1	07/22/13	WV	n/a	n/a	VI117

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-1, FA6583-2, FA6583-3, FA6583-4, FA6583-5, FA6583-6, FA6583-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	29.2	117	80-120
100-41-4	Ethylbenzene	25	28.3	113	81-121
591-78-6	2-Hexanone	125	137	110	61-129
87-68-3	Hexachlorobutadiene	25	30.8	123	75-142
110-54-3	Hexane	25	30.9	124	69-132
98-82-8	Isopropylbenzene	25	30.9	124	83-132
99-87-6	p-Isopropyltoluene	25	29.8	119	79-130
108-10-1	4-Methyl-2-pentanone	125	134	107	66-122
74-83-9	Methyl bromide	25	24.6	98	59-143
74-87-3	Methyl chloride	25	22.6	90	50-159
74-95-3	Methylene bromide	25	24.2	97	78-119
75-09-2	Methylene chloride	25	27.4	110	69-135
78-93-3	Methyl ethyl ketone	125	138	110	56-143
1634-04-4	Methyl Tert Butyl Ether	25	25.2	101	72-117
91-20-3	Naphthalene	25	23.0	92	63-132
103-65-1	n-Propylbenzene	25	31.7	127	82-133
100-42-5	Styrene	25	27.4	110	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	28.3	113	77-122
71-55-6	1,1,1-Trichloroethane	25	30.7	123	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	24.4	98	72-120
79-00-5	1,1,2-Trichloroethane	25	26.6	106	76-119
87-61-6	1,2,3-Trichlorobenzene	25	26.0	104	68-131
96-18-4	1,2,3-Trichloropropane	25	25.2	101	77-120
120-82-1	1,2,4-Trichlorobenzene	25	27.5	110	73-129
95-63-6	1,2,4-Trimethylbenzene	25	28.3	113	79-120
108-67-8	1,3,5-Trimethylbenzene	25	27.0	108	79-120
127-18-4	Tetrachloroethylene	25	26.6	106	76-135
108-88-3	Toluene	25	27.4	110	80-120
79-01-6	Trichloroethylene	25	28.6	114	81-126
75-69-4	Trichlorofluoromethane	25	30.1	120	71-156
75-01-4	Vinyl chloride	25	25.8	103	69-159
108-05-4	Vinyl Acetate	125	132	106	43-154
	m,p-Xylene	50	60.0	120	79-126
95-47-6	o-Xylene	25	31.1	124	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI117-BS	I13141.D	1	07/22/13	WV	n/a	n/a	VI117

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-1, FA6583-2, FA6583-3, FA6583-4, FA6583-5, FA6583-6, FA6583-7

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	79-125%
2037-26-5	Toluene-D8	91%	85-112%
460-00-4	4-Bromofluorobenzene	107%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI118-BS	I13168.D	1	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	169	135	50-147
107-02-8	Acrolein	125	245	196*	31-154
107-13-1	Acrylonitrile	125	116	93	58-126
71-43-2	Benzene	25	27.7	111	81-122
108-86-1	Bromobenzene	25	25.1	100	80-121
74-97-5	Bromochloromethane	25	25.6	102	76-123
75-27-4	Bromodichloromethane	25	24.4	98	79-123
75-25-2	Bromoform	25	23.6	94	66-123
104-51-8	n-Butylbenzene	25	26.3	105	79-126
135-98-8	sec-Butylbenzene	25	28.2	113	83-133
98-06-6	tert-Butylbenzene	25	28.5	114	80-133
108-90-7	Chlorobenzene	25	27.2	109	82-124
75-00-3	Chloroethane	25	25.0	100	62-144
67-66-3	Chloroform	25	26.2	105	80-124
95-49-8	o-Chlorotoluene	25	27.8	111	81-127
106-43-4	p-Chlorotoluene	25	28.9	116	83-130
110-75-8	2-Chloroethyl vinyl ether	125	92.9	74	56-122
75-15-0	Carbon disulfide	25	33.1	132	66-148
56-23-5	Carbon tetrachloride	25	31.2	125	76-136
75-34-3	1,1-Dichloroethane	25	27.6	110	81-122
75-35-4	1,1-Dichloroethylene	25	28.7	115	78-137
563-58-6	1,1-Dichloropropene	25	30.3	121	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	22.2	89	64-123
106-93-4	1,2-Dibromoethane	25	24.4	98	75-120
107-06-2	1,2-Dichloroethane	25	27.2	109	75-125
78-87-5	1,2-Dichloropropane	25	27.6	110	76-124
142-28-9	1,3-Dichloropropane	25	24.4	98	80-118
594-20-7	2,2-Dichloropropane	25	31.3	125	74-139
124-48-1	Dibromochloromethane	25	23.5	94	78-122
75-71-8	Dichlorodifluoromethane	25	25.3	101	42-167
156-59-2	cis-1,2-Dichloroethylene	25	27.5	110	78-120
10061-01-5	cis-1,3-Dichloropropene	25	25.7	103	75-118
541-73-1	m-Dichlorobenzene	25	27.9	112	84-125
95-50-1	o-Dichlorobenzene	25	26.4	106	82-124
106-46-7	p-Dichlorobenzene	25	24.3	97	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.8	115	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI118-BS	I13168.D	1	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	27.6	110	80-120
100-41-4	Ethylbenzene	25	26.3	105	81-121
591-78-6	2-Hexanone	125	124	99	61-129
87-68-3	Hexachlorobutadiene	25	29.0	116	75-142
110-54-3	Hexane	25	29.8	119	69-132
98-82-8	Isopropylbenzene	25	28.9	116	83-132
99-87-6	p-Isopropyltoluene	25	27.2	109	79-130
108-10-1	4-Methyl-2-pentanone	125	126	101	66-122
74-83-9	Methyl bromide	25	23.9	96	59-143
74-87-3	Methyl chloride	25	23.3	93	50-159
74-95-3	Methylene bromide	25	24.8	99	78-119
75-09-2	Methylene chloride	25	27.3	109	69-135
78-93-3	Methyl ethyl ketone	125	132	106	56-143
1634-04-4	Methyl Tert Butyl Ether	25	23.7	95	72-117
91-20-3	Naphthalene	25	20.1	80	63-132
103-65-1	n-Propylbenzene	25	28.5	114	82-133
100-42-5	Styrene	25	25.4	102	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.6	102	77-122
71-55-6	1,1,1-Trichloroethane	25	28.4	114	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	22.0	88	72-120
79-00-5	1,1,2-Trichloroethane	25	25.1	100	76-119
87-61-6	1,2,3-Trichlorobenzene	25	23.9	96	68-131
96-18-4	1,2,3-Trichloropropane	25	22.9	92	77-120
120-82-1	1,2,4-Trichlorobenzene	25	25.3	101	73-129
95-63-6	1,2,4-Trimethylbenzene	25	26.1	104	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.4	102	79-120
127-18-4	Tetrachloroethylene	25	26.1	104	76-135
108-88-3	Toluene	25	26.9	108	80-120
79-01-6	Trichloroethylene	25	28.0	112	81-126
75-69-4	Trichlorofluoromethane	25	30.4	122	71-156
75-01-4	Vinyl chloride	25	26.2	105	69-159
108-05-4	Vinyl Acetate	125	128	102	43-154
	m,p-Xylene	50	55.3	111	79-126
95-47-6	o-Xylene	25	28.7	115	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI118-BS	I13168.D	1	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	108%	79-125%
2037-26-5	Toluene-D8	88%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6583-7MS	I13159.D	50	07/22/13	WV	n/a	n/a	VI117
FA6583-7MSD	I13160.D	50	07/22/13	WV	n/a	n/a	VI117
FA6583-7	I13144.D	10	07/22/13	WV	n/a	n/a	VI117
FA6583-7	I13155.D	50	07/22/13	WV	n/a	n/a	VI117

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-1, FA6583-2, FA6583-3, FA6583-4, FA6583-5, FA6583-6, FA6583-7

CAS No.	Compound	FA6583-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		6250	4830	77	5040	81	4	50-147/21
107-02-8	Acrolein	ND		6250	15700	251*	13200	211*	17	31-154/29
107-13-1	Acrylonitrile	ND		6250	5220	84	5700	91	9	58-126/16
71-43-2	Benzene	2850 [a]		1250	4150	102	4060	94	2	81-122/14
108-86-1	Bromobenzene	ND		1250	1240	99	1190	95	4	80-121/14
74-97-5	Bromochloromethane	ND		1250	1180	94	1190	95	1	76-123/14
75-27-4	Bromodichloromethane	ND		1250	1180	94	1110	89	6	79-123/19
75-25-2	Bromoform	ND		1250	972	78	912	73	6	66-123/21
104-51-8	n-Butylbenzene	ND		1250	1290	103	1250	100	3	79-126/16
135-98-8	sec-Butylbenzene	4.8	J	1250	1450	116	1390	111	4	83-133/16
98-06-6	tert-Butylbenzene	7.3	J	1250	1490	119	1400	111	6	80-133/16
108-90-7	Chlorobenzene	16.1		1250	1360	108	1340	106	1	82-124/14
75-00-3	Chloroethane	ND		1250	1180	94	1280	102	8	62-144/20
67-66-3	Chloroform	ND		1250	1300	104	1240	99	5	80-124/15
95-49-8	o-Chlorotoluene	ND		1250	1380	110	1320	106	4	81-127/15
106-43-4	p-Chlorotoluene	ND		1250	1430	114	1400	112	2	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		6250	2750	44*	2560	41*	7	56-122/23
75-15-0	Carbon disulfide	ND		1250	1310	105	1180	94	10	66-148/23
56-23-5	Carbon tetrachloride	ND		1250	1360	109	1310	105	4	76-136/23
75-34-3	1,1-Dichloroethane	ND		1250	1340	107	1320	106	2	81-122/15
75-35-4	1,1-Dichloroethylene	ND		1250	1300	104	1310	105	1	78-137/18
563-58-6	1,1-Dichloropropene	ND		1250	1450	116	1460	117	1	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		1250	993	79	1030	82	4	64-123/18
106-93-4	1,2-Dibromoethane	ND		1250	1230	98	1160	93	6	75-120/13
107-06-2	1,2-Dichloroethane	2.7	J	1250	1290	103	1270	101	2	75-125/14
78-87-5	1,2-Dichloropropane	ND		1250	1340	107	1370	110	2	76-124/14
142-28-9	1,3-Dichloropropane	ND		1250	1270	102	1240	99	2	80-118/13
594-20-7	2,2-Dichloropropane	ND		1250	1360	109	1320	106	3	74-139/17
124-48-1	Dibromochloromethane	ND		1250	1120	90	1020	82	9	78-122/19
75-71-8	Dichlorodifluoromethane	ND		1250	1490	119	1440	115	3	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND		1250	1230	98	1230	98	0	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		1250	1080	86	990	79	9	75-118/23
541-73-1	m-Dichlorobenzene	97.5		1250	1500	112	1440	107	4	84-125/14
95-50-1	o-Dichlorobenzene	371		1250	1640	102	1690	106	3	82-124/14
106-46-7	p-Dichlorobenzene	129		1250	1330	96	1280	92	4	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		1250	1410	113	1310	105	7	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6583-7MS	I13159.D	50	07/22/13	WV	n/a	n/a	VI117
FA6583-7MSD	I13160.D	50	07/22/13	WV	n/a	n/a	VI117
FA6583-7	I13144.D	10	07/22/13	WV	n/a	n/a	VI117
FA6583-7	I13155.D	50	07/22/13	WV	n/a	n/a	VI117

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-1, FA6583-2, FA6583-3, FA6583-4, FA6583-5, FA6583-6, FA6583-7

CAS No.	Compound	FA6583-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		1250	1170	94	1100	88	6	80-120/22
100-41-4	Ethylbenzene	67.3		1250	1430	109	1350	103	6	81-121/14
591-78-6	2-Hexanone	ND		6250	5910	95	6130	98	4	61-129/18
87-68-3	Hexachlorobutadiene	ND		1250	1330	106	1280	102	4	75-142/19
110-54-3	Hexane	ND		1250	1380	110	1390	111	1	69-132/20
98-82-8	Isopropylbenzene	1280 [a]		1250	2710	123	2570	112	5	83-132/15
99-87-6	p-Isopropyltoluene	ND		1250	1360	109	1300	104	5	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		6250	6160	99	6410	103	4	66-122/16
74-83-9	Methyl bromide	ND		1250	1090	87	1100	88	1	59-143/19
74-87-3	Methyl chloride	ND		1250	1140	91	1160	93	2	50-159/19
74-95-3	Methylene bromide	ND		1250	1220	98	1200	96	2	78-119/14
75-09-2	Methylene chloride	33.8	J	1250	1350	105	1320	103	2	69-135/16
78-93-3	Methyl ethyl ketone	ND		6250	5370	86	5650	90	5	56-143/18
1634-04-4	Methyl Tert Butyl Ether	ND		1250	1170	94	1200	96	3	72-117/14
91-20-3	Naphthalene	ND		1250	1060	85	1070	86	1	63-132/25
103-65-1	n-Propylbenzene	32.3		1250	1460	114	1410	110	3	82-133/15
100-42-5	Styrene	ND		1250	1240	99	1180	94	5	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		1250	1340	107	1220	98	9	77-122/19
71-55-6	1,1,1-Trichloroethane	ND		1250	1420	114	1340	107	6	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		1250	1130	90	1150	92	2	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		1250	1260	101	1270	102	1	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		1250	1200	96	1210	97	1	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		1250	1220	98	1190	95	2	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		1250	1240	99	1240	99	0	73-129/20
95-63-6	1,2,4-Trimethylbenzene	ND		1250	1320	106	1250	100	5	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		1250	1230	98	1190	95	3	79-120/19
127-18-4	Tetrachloroethylene	ND		1250	1240	99	1230	98	1	76-135/16
108-88-3	Toluene	2.5	J	1250	1300	104	1230	98	6	80-120/14
79-01-6	Trichloroethylene	ND		1250	1340	107	1220	98	9	81-126/15
75-69-4	Trichlorofluoromethane	ND		1250	1320	106	1390	111	5	71-156/21
75-01-4	Vinyl chloride	ND		1250	1280	102	1280	102	0	69-159/18
108-05-4	Vinyl Acetate	ND		6250	6130	98	6280	100	2	43-154/14
	m,p-Xylene	3.6	J	2500	2770	111	2660	106	4	79-126/15
95-47-6	o-Xylene	ND		1250	1410	113	1370	110	3	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6583-7MS	I13159.D	50	07/22/13	WV	n/a	n/a	VI117
FA6583-7MSD	I13160.D	50	07/22/13	WV	n/a	n/a	VI117
FA6583-7	I13144.D	10	07/22/13	WV	n/a	n/a	VI117
FA6583-7	I13155.D	50	07/22/13	WV	n/a	n/a	VI117

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-1, FA6583-2, FA6583-3, FA6583-4, FA6583-5, FA6583-6, FA6583-7

CAS No.	Surrogate Recoveries	MS	MSD	FA6583-7	FA6583-7	Limits
1868-53-7	Dibromofluoromethane	99%	100%	98%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	107%	104%	111%	79-125%
2037-26-5	Toluene-D8	90%	91%	98%	98%	85-112%
460-00-4	4-Bromofluorobenzene	100%	104%	111%	116%	83-118%

(a) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6536-1MS	I13179.D	5	07/23/13	WV	n/a	n/a	VI118
FA6536-1MSD	I13180.D	5	07/23/13	WV	n/a	n/a	VI118
FA6536-1	I13181.D	5	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-8

CAS No.	Compound	FA6536-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		625	506	81	586	94	15	50-147/21
107-02-8	Acrolein	ND		625	1160	186*	1220	195*	5	31-154/29
107-13-1	Acrylonitrile	ND		625	537	86	595	95	10	58-126/16
71-43-2	Benzene	335		125	499	131* [a]	472	110	6	81-122/14
108-86-1	Bromobenzene	ND		125	133	106	123	98	8	80-121/14
74-97-5	Bromochloromethane	ND		125	131	105	118	94	10	76-123/14
75-27-4	Bromodichloromethane	ND		125	122	98	114	91	7	79-123/19
75-25-2	Bromoform	ND		125	82.1	66	92.5	74	12	66-123/21
104-51-8	n-Butylbenzene	4.7	J	125	152	118	148	115	3	79-126/16
135-98-8	sec-Butylbenzene	4.7	J	125	159	123	156	121	2	83-133/16
98-06-6	tert-Butylbenzene	3.8	J	125	153	119	155	121	1	80-133/16
108-90-7	Chlorobenzene	ND		125	151	121	143	114	5	82-124/14
75-00-3	Chloroethane	ND		125	104	83	114	91	9	62-144/20
67-66-3	Chloroform	ND		125	135	108	130	104	4	80-124/15
95-49-8	o-Chlorotoluene	ND		125	150	120	149	119	1	81-127/15
106-43-4	p-Chlorotoluene	ND		125	149	119	152	122	2	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		625	139	22*	58.6	9*	81*	56-122/23
75-15-0	Carbon disulfide	ND		125	119	95	125	100	5	66-148/23
56-23-5	Carbon tetrachloride	ND		125	147	118	127	102	15	76-136/23
75-34-3	1,1-Dichloroethane	ND		125	133	106	137	110	3	81-122/15
75-35-4	1,1-Dichloroethylene	ND		125	127	102	155	124	20*	78-137/18
563-58-6	1,1-Dichloropropene	ND		125	150	120	148	118	1	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		125	140	112	130	104	7	64-123/18
106-93-4	1,2-Dibromoethane	ND		125	126	101	134	107	6	75-120/13
107-06-2	1,2-Dichloroethane	ND		125	137	110	128	102	7	75-125/14
78-87-5	1,2-Dichloropropane	ND		125	152	122	150	120	1	76-124/14
142-28-9	1,3-Dichloropropane	ND		125	132	106	141	113	7	80-118/13
594-20-7	2,2-Dichloropropane	ND		125	148	118	150	120	1	74-139/17
124-48-1	Dibromochloromethane	ND		125	106	85	107	86	1	78-122/19
75-71-8	Dichlorodifluoromethane	ND		125	114	91	123	98	8	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND		125	136	109	136	109	0	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		125	124	99	113	90	9	75-118/23
541-73-1	m-Dichlorobenzene	ND		125	152	122	142	114	7	84-125/14
95-50-1	o-Dichlorobenzene	ND		125	155	124	143	114	8	82-124/14
106-46-7	p-Dichlorobenzene	ND		125	134	107	127	102	5	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		125	136	109	131	105	4	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6536-1MS	I13179.D	5	07/23/13	WV	n/a	n/a	VI118
FA6536-1MSD	I13180.D	5	07/23/13	WV	n/a	n/a	VI118
FA6536-1	I13181.D	5	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-8

CAS No.	Compound	FA6536-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		125	131	105	123	98	6	80-120/22
100-41-4	Ethylbenzene	44.7		125	190	116	186	113	2	81-121/14
591-78-6	2-Hexanone	ND		625	617	99	673	108	9	61-129/18
87-68-3	Hexachlorobutadiene	ND		125	166	133	158	126	5	75-142/19
110-54-3	Hexane	11.2		125	161	120	158	117	2	69-132/20
98-82-8	Isopropylbenzene	18.0		125	176	126	174	125	1	83-132/15
99-87-6	p-Isopropyltoluene	4.4	J	125	149	116	145	112	3	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		625	642	103	683	109	6	66-122/16
74-83-9	Methyl bromide	ND		125	93.1	74	112	90	18	59-143/19
74-87-3	Methyl chloride	ND		125	99.3	79	111	89	11	50-159/19
74-95-3	Methylene bromide	ND		125	127	102	120	96	6	78-119/14
75-09-2	Methylene chloride	ND		125	135	108	131	105	3	69-135/16
78-93-3	Methyl ethyl ketone	ND		625	595	95	653	104	9	56-143/18
1634-04-4	Methyl Tert Butyl Ether	278		125	373	76	405	102	8	72-117/14
91-20-3	Naphthalene	31.1		125	166	108	167	109	1	63-132/25
103-65-1	n-Propylbenzene	32.8		125	188	124	184	121	2	82-133/15
100-42-5	Styrene	ND		125	131	105	130	104	1	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		125	141	113	132	106	7	77-122/19
71-55-6	1,1,1-Trichloroethane	ND		125	143	114	144	115	1	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		125	126	101	125	100	1	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		125	191	153*	202	162*	6	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		125	146	117	132	106	10	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		125	130	104	125	100	4	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		125	153	122	141	113	8	73-129/20
95-63-6	1,2,4-Trimethylbenzene	88.0		125	226	110	224	109	1	79-120/18
108-67-8	1,3,5-Trimethylbenzene	11.9		125	150	110	148	109	1	79-120/19
127-18-4	Tetrachloroethylene	ND		125	136	109	132	106	3	76-135/16
108-88-3	Toluene	25.2		125	162	109	162	109	0	80-120/14
79-01-6	Trichloroethylene	ND		125	151	121	135	108	11	81-126/15
75-69-4	Trichlorofluoromethane	ND		125	135	108	146	117	8	71-156/21
75-01-4	Vinyl chloride	ND		125	103	82	122	98	17	69-159/18
108-05-4	Vinyl Acetate	ND		625	572	92	606	97	6	43-154/14
	m,p-Xylene	131		250	427	118	422	116	1	79-126/15
95-47-6	o-Xylene	42.6		125	200	126	199	125	1	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6536-1MS	I13179.D	5	07/23/13	WV	n/a	n/a	VI118
FA6536-1MSD	I13180.D	5	07/23/13	WV	n/a	n/a	VI118
FA6536-1	I13181.D	5	07/23/13	WV	n/a	n/a	VI118

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA6583-8

CAS No.	Surrogate Recoveries	MS	MSD	FA6536-1	Limits
1868-53-7	Dibromofluoromethane	100%	98%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	104%	107%	79-125%
2037-26-5	Toluene-D8	90%	91%	95%	85-112%
460-00-4	4-Bromofluorobenzene	102%	106%	110%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47914-MB	L064783.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47914-MB	L064783.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47914-MB	L064783.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	62%	14-67%
4165-62-2	Phenol-d5	38%	10-50%
118-79-6	2,4,6-Tribromophenol	73%	33-118%
4165-60-0	Nitrobenzene-d5	74%	42-108%
321-60-8	2-Fluorobiphenyl	71%	40-106%
1718-51-0	Terphenyl-d14	83%	39-121%

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47914-BS	L064782.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	22.3	22	10-69
95-57-8	2-Chlorophenol	50	37.7	75	52-98
59-50-7	4-Chloro-3-methyl phenol	50	38.5	77	54-103
120-83-2	2,4-Dichlorophenol	50	39.9	80	53-103
105-67-9	2,4-Dimethylphenol	50	34.8	70	43-90
51-28-5	2,4-Dinitrophenol	100	66.6	67	44-112
534-52-1	4,6-Dinitro-o-cresol	100	85.3	85	66-121
95-48-7	2-Methylphenol	50	30.6	61	43-90
	3&4-Methylphenol	100	59.1	59	36-88
88-75-5	2-Nitrophenol	50	38.6	77	53-102
100-02-7	4-Nitrophenol	100	34.8	35	18-62
87-86-5	Pentachlorophenol	100	81.5	82	61-115
108-95-2	Phenol	50	17.6	35	19-56
95-95-4	2,4,5-Trichlorophenol	50	42.8	86	62-109
88-06-2	2,4,6-Trichlorophenol	50	41.2	82	59-107
83-32-9	Acenaphthene	50	38.9	78	61-107
208-96-8	Acenaphthylene	50	40.4	81	60-104
62-53-3	Aniline	50	36.9	74	47-100
120-12-7	Anthracene	50	41.2	82	65-108
92-87-5	Benzidine	50	31.8	64	25-99
56-55-3	Benzo(a)anthracene	50	39.5	79	66-111
50-32-8	Benzo(a)pyrene	50	38.6	77	62-107
205-99-2	Benzo(b)fluoranthene	50	38.7	77	65-114
191-24-2	Benzo(g,h,i)perylene	50	40.4	81	66-116
207-08-9	Benzo(k)fluoranthene	50	44.7	89	65-114
101-55-3	4-Bromophenyl phenyl ether	50	41.4	83	65-109
85-68-7	Butyl benzyl phthalate	50	42.9	86	65-112
100-51-6	Benzyl Alcohol	50	31.9	64	46-94
91-58-7	2-Chloronaphthalene	50	37.9	76	57-103
106-47-8	4-Chloroaniline	50	38.5	77	49-105
86-74-8	Carbazole	50	39.5	79	59-113
218-01-9	Chrysene	50	41.1	82	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	42.6	85	51-102
111-44-4	bis(2-Chloroethyl)ether	50	39.9	80	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	38.4	77	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	42.4	85	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47914-BS	L064782.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	28.2	56	48-97
122-66-7	1,2-Diphenylhydrazine	50	39.0	78	61-110
541-73-1	1,3-Dichlorobenzene	50	27.9	56	45-95
106-46-7	1,4-Dichlorobenzene	50	29.1	58	45-98
121-14-2	2,4-Dinitrotoluene	50	40.0	80	61-110
606-20-2	2,6-Dinitrotoluene	50	42.0	84	63-108
91-94-1	3,3'-Dichlorobenzidine	50	33.5	67	46-117
53-70-3	Dibenzo(a,h)anthracene	50	40.3	81	66-119
132-64-9	Dibenzofuran	50	40.1	80	61-106
84-74-2	Di-n-butyl phthalate	50	40.1	80	65-107
117-84-0	Di-n-octyl phthalate	50	44.0	88	62-118
84-66-2	Diethyl phthalate	50	41.3	83	64-108
131-11-3	Dimethyl phthalate	50	41.3	83	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	43.4	87	61-117
206-44-0	Fluoranthene	50	38.1	76	63-106
86-73-7	Fluorene	50	40.4	81	62-108
118-74-1	Hexachlorobenzene	50	37.9	76	63-108
87-68-3	Hexachlorobutadiene	50	29.8	60	42-102
77-47-4	Hexachlorocyclopentadiene	50	27.0	54	39-102
67-72-1	Hexachloroethane	50	27.4	55	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	40.4	81	64-119
78-59-1	Isophorone	50	42.1	84	43-87
90-12-0	1-Methylnaphthalene	50	35.9	72	53-102
91-57-6	2-Methylnaphthalene	50	38.9	78	51-102
88-74-4	2-Nitroaniline	50	44.1	88	54-128
99-09-2	3-Nitroaniline	50	39.2	78	56-106
100-01-6	4-Nitroaniline	50	39.4	79	55-120
91-20-3	Naphthalene	50	35.1	70	47-100
98-95-3	Nitrobenzene	50	39.9	80	50-104
62-75-9	N-Nitrosodimethylamine	50	28.3	57	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	37.5	75	52-104
86-30-6	N-Nitrosodiphenylamine	50	39.6	79	64-108
85-01-8	Phenanthrene	50	40.9	82	66-110
129-00-0	Pyrene	50	41.9	84	64-113
110-86-1	Pyridine	50	26.9	54	23-74
120-82-1	1,2,4-Trichlorobenzene	50	32.5	65	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47914-BS	L064782.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	49%	14-67%
4165-62-2	Phenol-d5	34%	10-50%
118-79-6	2,4,6-Tribromophenol	79%	33-118%
4165-60-0	Nitrobenzene-d5	76%	42-108%
321-60-8	2-Fluorobiphenyl	79%	40-106%
1718-51-0	Terphenyl-d14	88%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47914-MS	L064791.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265
OP47914-MSD	L064792.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265
FA6562-5	L064790.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	FA6562-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	49 U		196	76.9	39	58.2	30	28	10-69/39
95-57-8	2-Chlorophenol	4.9 U		98	73.9	75	62.7	64	16	52-98/25
59-50-7	4-Chloro-3-methyl phenol	4.9 U		98	73.2	75	69.1	70	6	54-103/23
120-83-2	2,4-Dichlorophenol	4.9 U		98	71.2	73	63.8	65	11	53-103/26
105-67-9	2,4-Dimethylphenol	4.9 U		98	61.7	63	56.8	58	8	43-90/27
51-28-5	2,4-Dinitrophenol	24 U		196	125	64	112	57	11	44-112/25
534-52-1	4,6-Dinitro-o-cresol	9.7 U		196	168	86	148	75	13	66-121/23
95-48-7	2-Methylphenol	4.9 U		98	55.4	57	58.1	59	5	43-90/28
	3&4-Methylphenol	4.9 U		196	102	52	115	59	12	36-88/28
88-75-5	2-Nitrophenol	4.9 U		98	66.8	68	61.4	63	8	53-102/29
100-02-7	4-Nitrophenol	24 U		196	110	56	86.3	44	24	18-62/33
87-86-5	Pentachlorophenol	24 U		196	154	79	153	78	1	61-115/26
108-95-2	Phenol	4.9 U		98	44.6	45	42.7	44	4	19-56/35
95-95-4	2,4,5-Trichlorophenol	4.9 U		98	76.2	78	69.2	71	10	62-109/22
88-06-2	2,4,6-Trichlorophenol	4.9 U		98	73.4	75	65.1	66	12	59-107/23
83-32-9	Acenaphthene	4.9 U		98	70.9	72	68.9	70	3	61-107/22
208-96-8	Acenaphthylene	4.9 U		98	73.9	75	67.1	68	10	60-104/22
62-53-3	Aniline	4.9 U		98	71.1	73	67.6	69	5	47-100/30
120-12-7	Anthracene	4.9 U		98	82.2	84	74.9	76	9	65-108/20
92-87-5	Benzidine	24 U		98	32.1	33	45.9	47	35*	25-99/31
56-55-3	Benzo(a)anthracene	4.9 U		98	75.3	77	73.1	75	3	66-111/22
50-32-8	Benzo(a)pyrene	4.9 U		98	70.0	71	65.2	67	7	62-107/23
205-99-2	Benzo(b)fluoranthene	4.9 U		98	78.9	80	64.7	66	20	65-114/23
191-24-2	Benzo(g,h,i)perylene	4.9 U		98	75.4	77	73.8	75	2	66-116/23
207-08-9	Benzo(k)fluoranthene	4.9 U		98	77.7	79	73.7	75	5	65-114/24
101-55-3	4-Bromophenyl phenyl ether	4.9 U		98	77.6	79	76.5	78	1	65-109/23
85-68-7	Butyl benzyl phthalate	4.9 U		98	82.9	85	76.6	78	8	65-112/24
100-51-6	Benzyl Alcohol	4.9 U		98	60.6	62	61.9	63	2	46-94/27
91-58-7	2-Chloronaphthalene	4.9 U		98	71.5	73	66.7	68	7	57-103/23
106-47-8	4-Chloroaniline	4.9 U		98	71.3	73	63.3	65	12	49-105/27
86-74-8	Carbazole	4.9 U		98	76.8	78	71.2	73	8	59-113/21
218-01-9	Chrysene	4.9 U		98	74.7	76	73.1	75	2	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	4.9 U		98	74.0	75	68.3	70	8	51-102/28
111-44-4	bis(2-Chloroethyl)ether	4.9 U		98	68.8	70	64.9	66	6	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	4.9 U		98	63.0	64	68.6	70	9	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	4.9 U		98	77.4	79	70.4	72	9	62-105/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47914-MS	L064791.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265
OP47914-MSD	L064792.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265
FA6562-5	L064790.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	FA6562-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	4.9 U		98	54.4	55	59.1	60	8	48-97/24
122-66-7	1,2-Diphenylhydrazine	4.9 U		98	77.1	79	73.1	75	5	61-110/24
541-73-1	1,3-Dichlorobenzene	4.9 U		98	59.7	61	50.3	51	17	45-95/25
106-46-7	1,4-Dichlorobenzene	4.9 U		98	60.1	61	53.5	55	12	45-98/25
121-14-2	2,4-Dinitrotoluene	4.9 U		98	77.3	79	67.3	69	14	61-110/21
606-20-2	2,6-Dinitrotoluene	4.9 U		98	76.2	78	70.3	72	8	63-108/21
91-94-1	3,3'-Dichlorobenzidine	4.9 U		98	68.2	70	62.2	63	9	46-117/29
53-70-3	Dibenzo(a,h)anthracene	4.9 U		98	76.1	78	71.1	73	7	66-119/24
132-64-9	Dibenzofuran	4.9 U		98	71.3	73	67.0	68	6	61-106/21
84-74-2	Di-n-butyl phthalate	4.9 U		98	80.0	82	76.8	78	4	65-107/21
117-84-0	Di-n-octyl phthalate	4.9 U		98	80.2	82	74.9	76	7	62-118/24
84-66-2	Diethyl phthalate	4.9 U		98	77.4	79	69.4	71	11	64-108/21
131-11-3	Dimethyl phthalate	4.9 U		98	78.8	80	71.3	73	10	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	4.9 U		98	84.6	86	78.2	80	8	61-117/23
206-44-0	Fluoranthene	4.9 U		98	76.1	78	72.4	74	5	63-106/21
86-73-7	Fluorene	4.9 U		98	75.0	77	64.7	66	15	62-108/20
118-74-1	Hexachlorobenzene	4.9 U		98	79.0	81	71.0	72	11	63-108/22
87-68-3	Hexachlorobutadiene	4.9 U		98	58.4	60	53.7	55	8	42-102/28
77-47-4	Hexachlorocyclopentadiene	4.9 U		98	55.1	56	49.5	50	11	39-102/29
67-72-1	Hexachloroethane	4.9 U		98	47.5	48	56.1	57	17	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	4.9 U		98	74.1	76	69.3	71	7	64-119/24
78-59-1	Isophorone	4.9 U		98	73.9	75	70.2	72	5	43-87/25
90-12-0	1-Methylnaphthalene	4.9 U		98	68.7	70	63.9	65	7	53-102/27
91-57-6	2-Methylnaphthalene	4.9 U		98	70.0	71	68.0	69	3	51-102/26
88-74-4	2-Nitroaniline	4.9 U		98	79.0	81	68.9	70	14	54-128/24
99-09-2	3-Nitroaniline	4.9 U		98	72.4	74	68.6	70	5	56-106/27
100-01-6	4-Nitroaniline	4.9 U		98	75.6	77	68.6	70	10	55-120/24
91-20-3	Naphthalene	4.9 U		98	67.4	69	63.9	65	5	47-100/29
98-95-3	Nitrobenzene	4.9 U		98	69.8	71	80.3	82	14	50-104/28
62-75-9	N-Nitrosodimethylamine	4.9 U		98	65.0	66	57.4	59	12	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	4.9 U		98	59.5	61	67.5	69	13	52-104/25
86-30-6	N-Nitrosodiphenylamine	4.9 U		98	80.3	82	73.5	75	9	64-108/23
85-01-8	Phenanthrene	4.9 U		98	78.1	80	73.9	75	6	66-110/21
129-00-0	Pyrene	4.9 U		98	78.0	80	73.5	75	6	64-113/23
110-86-1	Pyridine	9.7 U		98	48.3	49	46.5	47	4	23-74/34
120-82-1	1,2,4-Trichlorobenzene	4.9 U		98	61.8	63	57.9	59	7	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47914-MS	L064791.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265
OP47914-MSD	L064792.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265
FA6562-5	L064790.D	1	07/24/13	NAF	07/24/13	OP47914	SL3265

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Surrogate Recoveries	MS	MSD	FA6562-5	Limits
367-12-4	2-Fluorophenol	59%	52%	40%	14-67%
4165-62-2	Phenol-d5	46%	43%	28%	10-50%
118-79-6	2,4,6-Tribromophenol	76%	68%	70%	33-118%
4165-60-0	Nitrobenzene-d5	68%	80%	67%	42-108%
321-60-8	2-Fluorobiphenyl	71%	66%	68%	40-106%
1718-51-0	Terphenyl-d14	85%	77%	83%	39-121%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5021-MB	CD123084.D	1	07/22/13	CP	n/a	n/a	GCD5021

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	107%	70-131%
98-08-8	aaa-Trifluorotoluene	96%	69-143%

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5021-BS	CD123083.D	1	07/22/13	CP	n/a	n/a	GCD5021

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.419	105	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	112%	70-131%
98-08-8	aaa-Trifluorotoluene	112%	69-143%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA6638-1MS	CD123091.D	1	07/22/13	CP	n/a	n/a	GCD5021
FA6638-1MSD	CD123092.D	1	07/22/13	CP	n/a	n/a	GCD5021
FA6638-1	CD123087.D	1	07/22/13	CP	n/a	n/a	GCD5021

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	FA6638-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		0.4	0.398	100	0.382	96	4	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA6638-1	Limits
460-00-4	4-Bromofluorobenzene	98%	97%	104%	70-131%
98-08-8	aaa-Trifluorotoluene	100%	97%	88%	69-143%

8.3.1

8

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-MB	LL49491.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	90%	50-131%

9.1.1

9

Blank Spike Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-BS	LL49490.D	1	07/30/13	SJL	07/23/13	OP47901	GLL1869

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.843	84	56-123
	TPH (> C22-C36)	1	0.883	88	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	110%	50-131%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA6583
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47901-MS	LL49516.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870
OP47901-MSD	LL49517.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870
FA6510-3	LL49515.D	5	07/31/13	SJL	07/23/13	OP47901	GLL1870

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA6583-1, FA6583-3, FA6583-5, FA6583-7

CAS No.	Compound	FA6510-3 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	6.62		1.92	8.13	79	7.32	36* [a]	10	56-123/33
	TPH (> C22-C36)	ND		1.92	1.75	91	1.63	85	7	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA6510-3	Limits
84-15-1	o-Terphenyl	108%	96%	95%	50-131%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA6583
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:					07/24/13		07/24/13		07/24/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Aluminum	200	15	15						
Antimony	6.0	1.3	1.3						
Arsenic	10	1.6	2.5						
Barium	200	1	1						
Beryllium	4.0	.5	.5						
Cadmium	5.0	.5	.5						
Calcium	1000	50	50						
Chromium	10	1.8	2						
Cobalt	50	.5	.5						
Copper	25	1	1						
Iron	300	29	29	-9.3	<300				
Lead	5.0	1.1	1.1						
Magnesium	5000	74	74						
Manganese	15	.7	.7	-0.10	<15	-0.10	<15	-0.20	<15
Molybdenum	50	.6	1						
Nickel	40	.5	.5						
Potassium	10000	200	200						
Selenium	10	2	2						
Silver	10	.5	.5						
Sodium	10000	500	500						
Strontium	10	.5	.5						
Thallium	10	1.3	1.3						
Tin	50	.7	1.8						
Titanium	10	.9	1						
Vanadium	50	.5	1						
Zinc	20	3	5						

Associated samples MP25542: FA6583-1, FA6583-3, FA6583-5, FA6583-7, FA6583-1F, FA6583-3F, FA6583-5F, FA6583-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA6583
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			07/24/13					07/24/13	
Metal	FA6464-1 Original	DUP	RPD	QC Limits	FA6464-1 Original	MS	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron	367	358	2.5	0-20	367	23500	26000	89.0	70-130
Lead									
Magnesium									
Manganese	553	543	1.8	0-20	553	998	500	89.0	70-130
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP25542: FA6583-1, FA6583-3, FA6583-5, FA6583-7, FA6583-1F, FA6583-3F, FA6583-5F, FA6583-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA6583
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	FA6464-1 Original	MSD	Spikelot MPFLICP1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	367	23200	26000	87.8	1.3	20
Lead						
Magnesium						
Manganese	553	981	500	85.6	1.7	20
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP25542: FA6583-1, FA6583-3, FA6583-5, FA6583-7, FA6583-1F, FA6583-3F, FA6583-5F, FA6583-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA6583
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	BSP Result	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	25600	26000	98.5	85-115
Lead				
Magnesium				
Manganese	501	500	100.2	85-115
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP25542: FA6583-1, FA6583-3, FA6583-5, FA6583-7, FA6583-1F, FA6583-3F, FA6583-5F, FA6583-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA6583
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	FA6464-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	367	332	9.6	0-10
Lead				
Magnesium				
Manganese	553	575	3.9	0-10
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP25542: FA6583-1, FA6583-3, FA6583-5, FA6583-7, FA6583-1F, FA6583-3F, FA6583-5F, FA6583-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA6583
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP25542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 07/24/13

Metal	Sample ml	Final ml	FA6464-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10	366.6	359.268	3087	0.2	150	3000	90.9	85-115
Lead										
Magnesium										
Manganese	9.8	10	553.3	542.234	583.5	0.2	2.5	50	82.5*(a)	85-115
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP25542: FA6583-1, FA6583-3, FA6583-5, FA6583-7, FA6583-1F, FA6583-3F, FA6583-5F, FA6583-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6583
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP22135/GN56947	2.0	0.0	mg/l	198	230	116.1*(a)	85-115%
Chemical Oxygen Demand	GP22147/GN56909	20	0.0	mg/l	50.0	50.9	102.0	87-122%
Chemical Oxygen Demand	GP22154/GN56946	20	0.0	mg/l	50.0	47.8	95.6	87-122%
Chloride	GP22134/GN56897	2.0	0.0	mg/l	50	50.4	100.8	90-110%
Chloride	GP22138/GN56897	2.0	0.0	mg/l	50	50.5	101.0	90-110%
Iron, Ferrous	GN56849	0.10	0.0	mg/l	0.500	0.50	100.2	82-115%
Nitrogen, Ammonia	GP22208/GN57090	0.10	0.0	mg/l	2.5	2.55	102.0	90-110%
Nitrogen, Nitrate	GP22134/GN56897	0.10	0.0	mg/l	2.5	2.60	104.0	90-110%
Nitrogen, Nitrate	GP22138/GN56897	0.10	0.0	mg/l	2.5	2.60	104.0	90-110%
Nitrogen, Nitrite	GP22134/GN56897	0.10	0.0	mg/l	2.5	2.66	106.4	90-110%
Nitrogen, Nitrite	GP22138/GN56897	0.10	0.0	mg/l	2.5	2.66	106.4	90-110%
Nitrogen, Total Kjeldahl	GP22158/GN56966	0.53	0.0	mg/l	2.63	2.74	104.4	90-110%
Solids, Total Dissolved	GN56919	100	19.0	mg/l				
Solids, Total Dissolved	GN56969	100	18.0	mg/l				
Sulfate	GP22134/GN56897	2.0	0.0	mg/l	50	51.1	102.2	90-110%
Sulfate	GP22138/GN56897	2.0	0.0	mg/l	50	51.4	102.8	90-110%

Associated Samples:
Batch GN56849: FA6583-1, FA6583-3, FA6583-5, FA6583-7
Batch GN56919: FA6583-1, FA6583-3
Batch GN56969: FA6583-5, FA6583-7
Batch GP22134: FA6583-1, FA6583-3
Batch GP22135: FA6583-1, FA6583-3, FA6583-5, FA6583-7
Batch GP22138: FA6583-5, FA6583-7
Batch GP22147: FA6583-7
Batch GP22154: FA6583-1, FA6583-3, FA6583-5
Batch GP22158: FA6583-1, FA6583-3, FA6583-5, FA6583-7
Batch GP22208: FA6583-1, FA6583-3, FA6583-5, FA6583-7
(*) Outside of QC limits
(a) Spike recovery outside of acceptable QC criteria.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6583
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP22135/GN56947	FA6573-1	mg/l	0.0	0.0	200.0(a)	0-30%
Iron, Ferrous	GN56849	FA6583-1	mg/l	0.27	0.28	3.5	0-31%
Solids, Total Dissolved	GN56919	FA6498-17	mg/l	592	589	0.5	0-5%
Solids, Total Dissolved	GN56969	FA6621-4	mg/l	1010	1000	1.0	0-5%

Associated Samples:
Batch GN56849: FA6583-1, FA6583-3, FA6583-5, FA6583-7
Batch GN56919: FA6583-1, FA6583-3
Batch GN56969: FA6583-5, FA6583-7
Batch GP22135: FA6583-1, FA6583-3, FA6583-5, FA6583-7
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6583
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP22147/GN56909	FA6573-1	mg/l	0.0	50.0	55.8	107.0	87-122%
Chemical Oxygen Demand	GP22154/GN56946	FA6583-1	mg/l	40.3	50.0	88.1	95.6	87-122%
Chloride	GP22134/GN56897	FA6522-3	mg/l	205	50	249	88.0(a)	90-110%
Chloride	GP22138/GN56897	FA6575-8	mg/l	100	50	154	108.0	90-110%
Nitrogen, Ammonia	GP22208/GN57090	FA6722-11	mg/l	0.0	2.5	2.6	104.0	90-110%
Nitrogen, Nitrate	GP22134/GN56897	FA6522-3	mg/l	0.50 U	2.5	2.6	104.0	90-110%
Nitrogen, Nitrate	GP22138/GN56897	FA6575-8	mg/l	0.41	2.5	2.8	95.6	90-110%
Nitrogen, Nitrite	GP22134/GN56897	FA6522-3	mg/l	0.50 U	2.5	2.6	104.0	90-110%
Nitrogen, Nitrite	GP22138/GN56897	FA6575-8	mg/l	0.25 U	2.5	2.8	112.0N(b)	90-110%
Nitrogen, Total Kjeldahl	GP22158/GN56966	FA6510-1	mg/l	2.4	2.63	4.9	95.2	90-110%
Sulfate	GP22134/GN56903	FA6522-3	mg/l	1110	50	1090	-40.0(a)	90-110%
Sulfate	GP22138/GN56897	FA6575-8	mg/l	239	50	291	104.0	90-110%

Associated Samples:
Batch GP22134: FA6583-1, FA6583-3
Batch GP22138: FA6583-5, FA6583-7
Batch GP22147: FA6583-7
Batch GP22154: FA6583-1, FA6583-3, FA6583-5
Batch GP22158: FA6583-1, FA6583-3, FA6583-5, FA6583-7
Batch GP22208: FA6583-1, FA6583-3, FA6583-5, FA6583-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA6583
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chemical Oxygen Demand	GP22147/GN56909	FA6573-1	mg/l	0.0	50.0	55.8	0.0	26%
Chemical Oxygen Demand	GP22154/GN56946	FA6583-1	mg/l	40.3	50.0	90.6	2.8	26%
Chloride	GP22134/GN56897	FA6522-3	mg/l	205	50	246	1.2	20%
Chloride	GP22138/GN56897	FA6575-8	mg/l	100	50	150	2.6	20%
Nitrogen, Ammonia	GP22208/GN57090	FA6722-11	mg/l	0.0	2.5	2.6	0.0	20%
Nitrogen, Nitrate	GP22134/GN56897	FA6522-3	mg/l	0.50 U	2.5	2.6	0.0	20%
Nitrogen, Nitrate	GP22138/GN56897	FA6575-8	mg/l	0.41	2.5	2.8	0.0	20%
Nitrogen, Nitrite	GP22134/GN56897	FA6522-3	mg/l	0.50 U	2.5	2.8	7.4	20%
Nitrogen, Nitrite	GP22138/GN56897	FA6575-8	mg/l	0.25 U	2.5	2.6	7.4	20%
Nitrogen, Total Kjeldahl	GP22158/GN56966	FA6510-1	mg/l	2.4	2.63	5.1	4.0	20%
Sulfate	GP22134/GN56903	FA6522-3	mg/l	1110	50	1100	0.9	20%
Sulfate	GP22138/GN56897	FA6575-8	mg/l	239	50	288	1.0	20%

Associated Samples:
Batch GP22134: FA6583-1, FA6583-3
Batch GP22138: FA6583-5, FA6583-7
Batch GP22147: FA6583-7
Batch GP22154: FA6583-1, FA6583-3, FA6583-5
Batch GP22158: FA6583-1, FA6583-3, FA6583-5, FA6583-7
Batch GP22208: FA6583-1, FA6583-3, FA6583-5, FA6583-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Southeast ACCUTEST LABORATORIES

11/12/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA9288

Sampling Date: 10/21/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **88**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

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Accutest LabLink@146579 10:00 12-Nov-2013

Sample Summary

Bhate Environmental

Job No: FA9288

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA9288-1	10/21/13	11:15	DMZB	10/22/13	AQ	Ground Water	SS61-MW31
FA9288-1F	10/21/13	11:15	DMZB	10/22/13	AQ	Groundwater Filtered	SS61-MW31
FA9288-2	10/21/13	00:00	DMZB	10/22/13	AQ	Trip Blank Water	TRIP BLANK
FA9288-3	10/21/13	12:40	DMZB	10/22/13	AQ	Ground Water	SS61-MW30
FA9288-3F	10/21/13	12:40	DMZB	10/22/13	AQ	Groundwater Filtered	SS61-MW30
FA9288-4	10/21/13	00:00	DMZB	10/22/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA9288

Site: Holloman AFB; SS61 VCM **Report Date** 11/11/2013 8:59:57 PM

2 Samples and 2 Trip Blanks were collected on 10/21/2013 and were received at Accutest SE on 10/22/2013 properly preserved, at 1.8 Deg. C and intact. These Samples received an Accutest job number of FA9288. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VE920

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9290-2MS, FA9290-2MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, cis-1,3-Dichloropropene, Dichlorodifluoromethane, trans-1,3-Dichloropropene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, Bromoform, cis-1,3-Dichloropropene, Dichlorodifluoromethane, trans-1,3-Dichloropropene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP49187

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9276-3MS, FA9276-3MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for 4-Bromophenyl phenyl ether, Phenol are outside control limits.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for Benzidine are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for Benzidine are outside control limits for sample OP49187-MSD. Probable cause is due to sample non-homogeneity.

FA9288-1 for 4-Bromophenyl phenyl ether: Associated BS recovery outside control limits.

FA9288-1 for Phenol: Associated BS recovery outside control limits.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD5084

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-1MS, FA9288-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP49193

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-1MS, FA9288-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for TPH (>C22-C36), TPH (C10-C22) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for TPH (C10-C22) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for TPH (C10-C22) are outside control limits for sample OP49193-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) OP49193-MS has surrogates outside control limits. Probable cause is due to matrix interference.

OP49193-MS for o-Terphenyl: Outside control limits.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP26255

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9260-1DUP, FA9260-1MS, FA9260-1MSD, FA9260-1PS, FA9260-1SDL were used as the QC samples for metals.

RPD(s) for Serial Dilution for Iron are outside control limits for sample MP26255-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP22737

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9277-2MS, FA9277-2MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA9288-3 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA9288-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP22816

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9328-1MS, FA9328-1MSD were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP22754

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-1MS, FA9375-1MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP22755

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-3MS, FA9288-3MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Matrix Spike Recovery(s) for Nitrogen, Total Kjeldahl are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN58401

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-1DUP was used as the QC samples for Iron, Ferrous.

RPD(s) for Duplicate for Iron, Ferrous are outside control limits for sample GN58401-D1. RPD acceptable due to low duplicate and sample concentrations.

FA9288-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA9288-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R32308

FA9288-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R32309

FA9288-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN58412

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9277-5DUP was used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP22741

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-1DUP was used as the QC samples for BOD, 5 Day.

Blank Spike Recovery(s) for BOD, 5 Day are outside control limits.

RPD(s) for Duplicate for BOD, 5 Day are outside control limits for sample GP22741-D1. RPD acceptable due to low duplicate and sample concentrations.

FA9288-1 for BOD, 5 Day: Estimated value. Result considered minimum due to low spike recovery.

FA9288-3 for BOD, 5 Day: Estimated value. Result considered minimum due to low spike recovery.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP22734

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9130-1MS, FA9130-1MSD were used as the QC samples for Chemical Oxygen Demand.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP22735

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-1MS, FA9288-1MSD were used as the QC samples for Chemical Oxygen Demand.

Matrix Spike Recovery(s) for Chemical Oxygen Demand are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: November 11, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA9288
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/21/13

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA9288-1	**SS61-MW31**					
sec-Butylbenzene		0.42 J	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		1.9	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		0.42 J	1.0	0.22	ug/l	SW846 8260B
Isopropylbenzene		13.5	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.0967 J	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		1.76	0.23	0.093	mg/l	SW846 8015C
TPH (> C22-C36)		0.101 J	0.23	0.093	mg/l	SW846 8015C
Iron		221 J	300	29	ug/l	EPA 200.7
Manganese		142	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		591	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		0.87 J	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [a]		0.22 J	0.40	0.059	mg/l	SM18 3500FED M
Nitrogen, Ammonia		0.077 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		0.86	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		16000	2000	200	mg/l	SM19 2540C
Sulfate		5170	1000	300	mg/l	EPA 300/SW846 9056A
FA9288-1F	**SS61-MW31**					
Manganese		133	15	0.70	ug/l	EPA 200.7
FA9288-2	**TRIP BLANK**					
Toluene		0.24 J	1.0	0.20	ug/l	SW846 8260B
FA9288-3	**SS61-MW30**					
1,2-Dichloroethane		7.9	1.0	0.22	ug/l	SW846 8260B
TPH (C10-C22)		0.0983 J	0.23	0.093	mg/l	SW846 8015C
Manganese		954	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		104	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		1.2	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferrous [b]		0.033 J	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		1.2	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		13800	1000	100	mg/l	SM19 2540C
Sulfate		5270	400	120	mg/l	EPA 300/SW846 9056A
FA9288-3F	**SS61-MW30**					
Manganese		999	15	0.70	ug/l	EPA 200.7

Summary of Hits

Job Number: FA9288
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/21/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA9288-4	**TRIP BLANK**					

No hits reported in this sample.

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E027194.D	1	10/30/13	TD	n/a	n/a	VE920
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.42	1.0	0.21	ug/l	J
98-06-6	tert-Butylbenzene	1.9	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.42	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	13.5	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T010283.D	1	10/30/13	FS	10/28/13	OP49187	ST493
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.3	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.66	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.7	0.66	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.3	1.3	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.67	ug/l	
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.63	ug/l	
100-02-7	4-Nitrophenol	ND	23	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	23	4.7	ug/l	
108-95-2	Phenol [a]	ND	4.7	0.51	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.84	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.65	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.70	ug/l	
92-87-5	Benzidine	ND	23	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.53	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.62	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.62	ug/l	
101-55-3	4-Bromophenyl phenyl ether [a]	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.93	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.68	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.64	ug/l	
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.67	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.64	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.60	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.72	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.65	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.64	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.75	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.54	ug/l	
132-64-9	Dibenzofuran	ND	4.7	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.7	0.93	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.7	0.93	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.93	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.75	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.55	ug/l	
86-73-7	Fluorene	ND	4.7	0.71	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.64	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.89	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.74	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.69	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	0.66	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.90	ug/l	
91-20-3	Naphthalene	ND	4.7	0.59	ug/l	
98-95-3	Nitrobenzene	ND	4.7	0.67	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.79	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.93	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.66	ug/l	
129-00-0	Pyrene	ND	4.7	0.63	ug/l	
110-86-1	Pyridine	ND	9.3	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	24%		14-67%
4165-62-2	Phenol-d5	20%		10-50%
118-79-6	2,4,6-Tribromophenol	56%		33-118%
4165-60-0	Nitrobenzene-d5	55%		42-108%
321-60-8	2-Fluorobiphenyl	57%		40-106%
1718-51-0	Terphenyl-d14	70%		39-121%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124548.D	1	10/25/13	CP	n/a	n/a	GCD5084
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.0967	0.10	0.050	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		70-131%
98-08-8	aaa-Trifluorotoluene	97%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38915.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
Run #2							

	Initial Volume	Final Volume
Run #1	1080 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	1.76	0.23	0.093	mg/l	
	TPH (> C22-C36)	0.101	0.23	0.093	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	221 J	300	29	ug/l	1	11/05/13	11/05/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	142	15	0.70	ug/l	1	11/05/13	11/05/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA11180
(2) Prep QC Batch: MP26255

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	4.0 U	4.0	4.0	mg/l	2	10/28/13 12:04	MG	SM19 5210B
Chemical Oxygen Demand	591	20	5.3	mg/l	1	10/22/13 10:00	LE	SM19 5220C
Hydrogen Sulfide	0.87 J	1.0	0.50	mg/l	1	10/23/13 11:15	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.22 J	0.40	0.059	mg/l	1	11/05/13 16:11	LM	SM18 3500FED M
Iron, Ferrous [c]	0.030 U	0.10	0.030	mg/l	1	10/22/13 11:50	LE	SM18 3500FED
Nitrogen, Ammonia	0.077 J	0.10	0.030	mg/l	1	11/01/13 11:23	VK	EPA 350.1
Nitrogen, Nitrate [d]	25 U	50	25	mg/l	500	10/22/13 12:55	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	0.86	0.53	0.17	mg/l	1	10/28/13 10:48	MG	EPA 351.2
Solids, Total Dissolved	16000	2000	200	mg/l	20	10/23/13 11:20	KC	SM19 2540C
Sulfate	5170	1000	300	mg/l	500	10/22/13 12:55	AA	EPA 300/SW846 9056A

(a) Estimated value. Result considered minimum due to low spike recovery.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW31		
Lab Sample ID:	FA9288-1F	**Date Sampled:**	10/21/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/22/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	133	15	0.70	ug/l	1	11/05/13	11/05/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA11180
(2) Prep QC Batch: MP26255

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9288-2	**Date Sampled:**	10/21/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E027195.D	1	10/30/13	TD	n/a	n/a	VE920
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9288-2	**Date Sampled:**	10/21/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.24	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9288-2	**Date Sampled:**	10/21/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	95%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E027196.D	1	10/30/13	TD	n/a	n/a	VE920
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	7.9	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T010284.D	1	10/30/13	FS	10/28/13	OP49187	ST493
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.3	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.66	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.7	0.66	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.3	1.3	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.67	ug/l	
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.63	ug/l	
100-02-7	4-Nitrophenol	ND	23	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	23	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.51	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.84	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.65	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.70	ug/l	
92-87-5	Benzidine	ND	23	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.53	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.62	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.62	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.93	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.68	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.64	ug/l	
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.67	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.64	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.60	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.72	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.65	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.64	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.75	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.54	ug/l	
132-64-9	Dibenzofuran	ND	4.7	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.7	0.93	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.7	0.93	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.93	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.75	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.55	ug/l	
86-73-7	Fluorene	ND	4.7	0.71	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.64	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.89	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.74	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.69	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	0.66	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.90	ug/l	
91-20-3	Naphthalene	ND	4.7	0.59	ug/l	
98-95-3	Nitrobenzene	ND	4.7	0.67	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.79	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.93	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.66	ug/l	
129-00-0	Pyrene	ND	4.7	0.63	ug/l	
110-86-1	Pyridine	ND	9.3	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	31%		14-67%
4165-62-2	Phenol-d5	23%		10-50%
118-79-6	2,4,6-Tribromophenol	69%		33-118%
4165-60-0	Nitrobenzene-d5	60%		42-108%
321-60-8	2-Fluorobiphenyl	59%		40-106%
1718-51-0	Terphenyl-d14	74%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124553.D	1	10/25/13	CP	n/a	n/a	GCD5084
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	81%		70-131%
98-08-8	aaa-Trifluorotoluene	94%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38918.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
Run #2							

	Initial Volume	Final Volume
Run #1	1080 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.0983	0.23	0.093	mg/l	J
	TPH (> C22-C36)	ND	0.23	0.093	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	54%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	29 U	300	29	ug/l	1	11/05/13	11/05/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	954	15	0.70	ug/l	1	11/05/13	11/05/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA11180
(2) Prep QC Batch: MP26255

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3	**Date Sampled:**	10/21/13
Matrix:	AQ - Ground Water	**Date Received:**	10/22/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	4.0 U	4.0	4.0	mg/l	2	10/28/13 12:04	MG	SM19 5210B
Chemical Oxygen Demand	104	20	5.3	mg/l	1	10/22/13 14:30	LE	SM19 5220C
Hydrogen Sulfide	1.2	1.0	0.50	mg/l	1	10/23/13 11:15	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.059 U	0.40	0.059	mg/l	1	11/05/13 16:16	LM	SM18 3500FED M
Iron, Ferrous [c]	0.033 J	0.10	0.030	mg/l	1	10/22/13 11:50	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	11/01/13 11:24	VK	EPA 350.1
Nitrogen, Nitrate [d]	10 U	20	10	mg/l	200	10/22/13 13:11	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.2	0.53	0.17	mg/l	1	10/28/13 11:02	MG	EPA 351.2
Solids, Total Dissolved	13800	1000	100	mg/l	10	10/23/13 11:20	KC	SM19 2540C
Sulfate	5270	400	120	mg/l	200	10/22/13 13:11	AA	EPA 300/SW846 9056A

(a) Estimated value. Result considered minimum due to low spike recovery.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW30		
Lab Sample ID:	FA9288-3F	**Date Sampled:**	10/21/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/22/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	999	15	0.70	ug/l	1	11/05/13	11/05/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA11180
(2) Prep QC Batch: MP26255

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9288-4	**Date Sampled:**	10/21/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E027197.D	1	10/30/13	TD	n/a	n/a	VE920
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9288-4	**Date Sampled:**	10/21/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9288-4	**Date Sampled:**	10/21/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/22/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA9288

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 10212013-01
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
1	SS61-MW31	SS61-MW31	10/21/13	1115	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				1
2	TRIP BLANK				-	TB	1	WQ	2	X													1
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. J. H. Moore	10/21/13	1400	1. [illegible]		
2. [illegible]	10-22-13	945	2. [illegible] MCSC	10-22-13	945
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest Labs
Lab Recipient:
Shipped No.:
Airbill Number: 7969 5597 0898
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

2.0 18

5.1 5

FA9288: Chain of Custody
Page 1 of 3

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA9288

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 10212013-02
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
3	SS61-MW30	SS61-MW30	10/21/13	1240	-	N	1	GW	18	X	X	X	X	X	X	X	X	X	X				2
4	TRP BLANK				-	TB	1	WQ	2	X													2
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/21/13	1400	1. [signature]		
2. [signature]	10-22-13	[illegible]	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7969 5597 1026
Analytical Lab: Accutest Labs
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA9288: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA9288 CLIENT: B Hate PROJECT: SS 61

DATE/TIME RECEIVED: 10-22-13 945 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: 2

METHOD OF DELIVERY: ~~FEDEX~~ UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7969 5597 1026

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [x] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR -10.4
- [ ] OBSERVED TEMPS: 1.6 1.4
- [ ] CORRECTED TEMPS: 2.0 , 1.8

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE R Will 10-22-13 REVIEWER SIGNATURE/DATE 10/22/13

NF 12/10

receipt confirmation 122910.xls

5.1

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FA9288: Chain of Custody

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Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE920-MB	E027188.D	1	10/30/13	TD	n/a	n/a	VE920

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9288-1, FA9288-2, FA9288-3, FA9288-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE920-MB	E027188.D	1	10/30/13	TD	n/a	n/a	VE920

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9288-1, FA9288-2, FA9288-3, FA9288-4

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE920-MB	E027188.D	1	10/30/13	TD	n/a	n/a	VE920

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9288-1, FA9288-2, FA9288-3, FA9288-4

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	83-118%
17060-07-0	1,2-Dichloroethane-D4	94%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE920-BS	E027186.D	1	10/30/13	TD	n/a	n/a	VE920

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9288-1, FA9288-2, FA9288-3, FA9288-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	176	141	50-147
107-02-8	Acrolein	125	51.6	41	31-154
107-13-1	Acrylonitrile	125	121	97	58-126
71-43-2	Benzene	25	27.7	111	81-122
108-86-1	Bromobenzene	25	26.6	106	80-121
74-97-5	Bromochloromethane	25	24.7	99	76-123
75-27-4	Bromodichloromethane	25	27.3	109	79-123
75-25-2	Bromoform	25	22.8	91	66-123
104-51-8	n-Butylbenzene	25	25.9	104	79-126
135-98-8	sec-Butylbenzene	25	28.4	114	83-133
98-06-6	tert-Butylbenzene	25	27.7	111	80-133
108-90-7	Chlorobenzene	25	28.7	115	82-124
75-00-3	Chloroethane	25	29.2	117	62-144
67-66-3	Chloroform	25	26.8	107	80-124
95-49-8	o-Chlorotoluene	25	30.0	120	81-127
106-43-4	p-Chlorotoluene	25	28.6	114	83-130
110-75-8	2-Chloroethyl vinyl ether	125	123	98	56-122
75-15-0	Carbon disulfide	25	24.6	98	66-148
56-23-5	Carbon tetrachloride	25	27.8	111	76-136
75-34-3	1,1-Dichloroethane	25	27.6	110	81-122
75-35-4	1,1-Dichloroethylene	25	30.0	120	78-137
563-58-6	1,1-Dichloropropene	25	30.2	121	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	24.6	98	64-123
106-93-4	1,2-Dibromoethane	25	27.2	109	75-120
107-06-2	1,2-Dichloroethane	25	26.2	105	75-125
78-87-5	1,2-Dichloropropane	25	27.6	110	76-124
142-28-9	1,3-Dichloropropane	25	26.9	108	80-118
594-20-7	2,2-Dichloropropane	25	28.7	115	74-139
124-48-1	Dibromochloromethane	25	27.1	108	78-122
75-71-8	Dichlorodifluoromethane	25	39.4	158	42-167
156-59-2	cis-1,2-Dichloroethylene	25	28.3	113	78-120
10061-01-5	cis-1,3-Dichloropropene	25	24.9	100	75-118
541-73-1	m-Dichlorobenzene	25	27.6	110	84-125
95-50-1	o-Dichlorobenzene	25	28.8	115	82-124
106-46-7	p-Dichlorobenzene	25	26.2	105	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.8	111	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE920-BS	E027186.D	1	10/30/13	TD	n/a	n/a	VE920

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9288-1, FA9288-2, FA9288-3, FA9288-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	27.4	110	80-120
100-41-4	Ethylbenzene	25	27.6	110	81-121
591-78-6	2-Hexanone	125	147	118	61-129
87-68-3	Hexachlorobutadiene	25	28.0	112	75-142
110-54-3	Hexane	25	24.8	99	69-132
98-82-8	Isopropylbenzene	25	28.2	113	83-132
99-87-6	p-Isopropyltoluene	25	27.5	110	79-130
108-10-1	4-Methyl-2-pentanone	125	135	108	66-122
74-83-9	Methyl bromide	25	31.8	127	59-143
74-87-3	Methyl chloride	25	30.5	122	50-159
74-95-3	Methylene bromide	25	26.3	105	78-119
75-09-2	Methylene chloride	25	27.7	111	69-135
78-93-3	Methyl ethyl ketone	125	120	96	56-143
1634-04-4	Methyl Tert Butyl Ether	25	24.7	99	72-117
91-20-3	Naphthalene	25	24.8	99	63-132
103-65-1	n-Propylbenzene	25	29.8	119	82-133
100-42-5	Styrene	25	25.1	100	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	27.6	110	77-122
71-55-6	1,1,1-Trichloroethane	25	27.8	111	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	24.7	99	72-120
79-00-5	1,1,2-Trichloroethane	25	25.9	104	76-119
87-61-6	1,2,3-Trichlorobenzene	25	27.7	111	68-131
96-18-4	1,2,3-Trichloropropane	25	24.9	100	77-120
120-82-1	1,2,4-Trichlorobenzene	25	24.6	98	73-129
95-63-6	1,2,4-Trimethylbenzene	25	25.3	101	79-120
108-67-8	1,3,5-Trimethylbenzene	25	26.8	107	79-120
127-18-4	Tetrachloroethylene	25	27.8	111	76-135
108-88-3	Toluene	25	26.8	107	80-120
79-01-6	Trichloroethylene	25	27.3	109	81-126
75-69-4	Trichlorofluoromethane	25	20.6	82	71-156
75-01-4	Vinyl chloride	25	29.3	117	69-159
108-05-4	Vinyl Acetate	125	123	98	43-154
	m,p-Xylene	50	60.5	121	79-126
95-47-6	o-Xylene	25	28.0	112	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE920-BS	E027186.D	1	10/30/13	TD	n/a	n/a	VE920

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9288-1, FA9288-2, FA9288-3, FA9288-4

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	96%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9290-2MS	E027202.D	1	10/30/13	TD	n/a	n/a	VE920
FA9290-2MSD	E027203.D	1	10/30/13	TD	n/a	n/a	VE920
FA9290-2	E027190.D	1	10/30/13	TD	n/a	n/a	VE920

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9288-1, FA9288-2, FA9288-3, FA9288-4

CAS No.	Compound	FA9290-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	119	95	126	101	6	50-147/21
107-02-8	Acrolein	ND		125	104	83	92.5	74	12	31-154/29
107-13-1	Acrylonitrile	ND		125	138	110	142	114	3	58-126/16
71-43-2	Benzene	ND		25	25.5	102	25.4	102	0	81-122/14
108-86-1	Bromobenzene	ND		25	24.1	96	24.1	96	0	80-121/14
74-97-5	Bromochloromethane	ND		25	22.3	89	22.4	90	0	76-123/14
75-27-4	Bromodichloromethane	ND		25	24.7	99	23.4	94	5	79-123/19
75-25-2	Bromoform	ND		25	17.1	68	15.9	64*	7	66-123/21
104-51-8	n-Butylbenzene	ND		25	23.1	92	23.7	95	3	79-126/16
135-98-8	sec-Butylbenzene	ND		25	26.0	104	26.1	104	0	83-133/16
98-06-6	tert-Butylbenzene	ND		25	25.3	101	25.4	102	0	80-133/16
108-90-7	Chlorobenzene	ND		25	26.6	106	26.3	105	1	82-124/14
75-00-3	Chloroethane	ND		25	32.9	132	31.3	125	5	62-144/20
67-66-3	Chloroform	ND		25	24.9	100	24.8	99	0	80-124/15
95-49-8	o-Chlorotoluene	ND		25	27.9	112	27.8	111	0	81-127/15
106-43-4	p-Chlorotoluene	ND		25	26.1	104	25.9	104	1	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		125	ND	0*	ND	0*	nc	56-122/23
75-15-0	Carbon disulfide	ND		25	22.2	89	19.6	78	12	66-148/23
56-23-5	Carbon tetrachloride	ND		25	24.6	98	23.2	93	6	76-136/23
75-34-3	1,1-Dichloroethane	ND		25	25.5	102	25.6	102	0	81-122/15
75-35-4	1,1-Dichloroethylene	ND		25	27.4	110	28.0	112	2	78-137/18
563-58-6	1,1-Dichloropropene	ND		25	27.6	110	27.4	110	1	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	20.8	83	21.9	88	5	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	24.3	97	24.7	99	2	75-120/13
107-06-2	1,2-Dichloroethane	ND		25	24.6	98	24.4	98	1	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	25.6	102	25.6	102	0	76-124/14
142-28-9	1,3-Dichloropropane	ND		25	24.5	98	24.9	100	2	80-118/13
594-20-7	2,2-Dichloropropane	ND		25	24.7	99	24.6	98	0	74-139/17
124-48-1	Dibromochloromethane	ND		25	22.8	91	21.3	85	7	78-122/19
75-71-8	Dichlorodifluoromethane	ND		25	47.6	190*	47.0	188*	1	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND		25	25.0	100	25.6	102	2	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	17.8	71*	16.4	66*	8	75-118/23
541-73-1	m-Dichlorobenzene	ND		25	24.7	99	24.8	99	0	84-125/14
95-50-1	o-Dichlorobenzene	ND		25	25.6	102	26.0	104	2	82-124/14
106-46-7	p-Dichlorobenzene	ND		25	23.8	95	23.8	95	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	25.6	102	25.5	102	0	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9290-2MS	E027202.D	1	10/30/13	TD	n/a	n/a	VE920
FA9290-2MSD	E027203.D	1	10/30/13	TD	n/a	n/a	VE920
FA9290-2	E027190.D	1	10/30/13	TD	n/a	n/a	VE920

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9288-1, FA9288-2, FA9288-3, FA9288-4

CAS No.	Compound	FA9290-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		25	19.4	78*	17.7	71*	9	80-120/22
100-41-4	Ethylbenzene	ND		25	25.5	102	25.4	102	0	81-121/14
591-78-6	2-Hexanone	ND		125	130	104	136	109	5	61-129/18
87-68-3	Hexachlorobutadiene	ND		25	23.1	92	24.7	99	7	75-142/19
110-54-3	Hexane	ND		25	24.2	97	23.5	94	3	69-132/20
98-82-8	Isopropylbenzene	ND		25	25.5	102	25.4	102	0	83-132/15
99-87-6	p-Isopropyltoluene	ND		25	24.7	99	24.9	100	1	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		125	126	101	131	105	4	66-122/16
74-83-9	Methyl bromide	ND		25	35.4	142	34.4	138	3	59-143/19
74-87-3	Methyl chloride	ND		25	32.3	129	30.7	123	5	50-159/19
74-95-3	Methylene bromide	ND		25	24.1	96	24.5	98	2	78-119/14
75-09-2	Methylene chloride	ND		25	25.5	102	25.5	102	0	69-135/16
78-93-3	Methyl ethyl ketone	ND		125	105	84	110	88	5	56-143/18
1634-04-4	Methyl Tert Butyl Ether	ND		25	22.0	88	22.7	91	3	72-117/14
91-20-3	Naphthalene	ND		25	20.4	82	22.8	91	11	63-132/25
103-65-1	n-Propylbenzene	ND		25	27.4	110	27.3	109	0	82-133/15
100-42-5	Styrene	ND		25	21.7	87	20.3	81	7	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		25	24.5	98	23.7	95	3	77-122/19
71-55-6	1,1,1-Trichloroethane	ND		25	25.2	101	25.2	101	0	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	23.2	93	23.6	94	2	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		25	24.0	96	24.0	96	0	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	22.2	89	24.8	99	11	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		25	22.9	92	23.5	94	3	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		25	19.9	80	21.9	88	10	73-129/20
95-63-6	1,2,4-Trimethylbenzene	ND		25	23.2	93	22.9	92	1	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		25	24.5	98	24.4	98	0	79-120/19
127-18-4	Tetrachloroethylene	28.1		25	53.8	103	53.0	100	1	76-135/16
108-88-3	Toluene	ND		25	24.3	97	24.2	97	0	80-120/14
79-01-6	Trichloroethylene	2.5		25	27.8	101	27.5	100	1	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	23.6	94	22.9	92	3	71-156/21
75-01-4	Vinyl chloride	ND		25	30.2	121	31.0	124	3	69-159/18
108-05-4	Vinyl Acetate	ND		125	146	117	146	117	0	43-154/14
	m,p-Xylene	ND		50	55.7	111	55.1	110	1	79-126/15
95-47-6	o-Xylene	ND		25	25.1	100	25.0	100	0	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9290-2MS	E027202.D	1	10/30/13	TD	n/a	n/a	VE920
FA9290-2MSD	E027203.D	1	10/30/13	TD	n/a	n/a	VE920
FA9290-2	E027190.D	1	10/30/13	TD	n/a	n/a	VE920

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9288-1, FA9288-2, FA9288-3, FA9288-4

CAS No.	Surrogate Recoveries	MS	MSD	FA9290-2	Limits
1868-53-7	Dibromofluoromethane	98%	98%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	100%	93%	79-125%
2037-26-5	Toluene-D8	97%	97%	100%	85-112%
460-00-4	4-Bromofluorobenzene	96%	97%	98%	83-118%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-MB	T010229.D	1	10/28/13	FS	10/28/13	OP49187	ST491

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-MB	T010229.D	1	10/28/13	FS	10/28/13	OP49187	ST491

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-MB	T010229.D	1	10/28/13	FS	10/28/13	OP49187	ST491

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	37%	14-67%
4165-62-2	Phenol-d5	23%	10-50%
118-79-6	2,4,6-Tribromophenol	78%	33-118%
4165-60-0	Nitrobenzene-d5	75%	42-108%
321-60-8	2-Fluorobiphenyl	72%	40-106%
1718-51-0	Terphenyl-d14	86%	39-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile [a]		0	ug/l	

(a) No TICs detected.

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-MB	T010275.D	1	10/30/13	FS	10/28/13	OP49187	ST493

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-MB	T010275.D	1	10/30/13	FS	10/28/13	OP49187	ST493

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-MB	T010275.D	1	10/30/13	FS	10/28/13	OP49187	ST493

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	32%	14-67%
4165-62-2	Phenol-d5	19%	10-50%
118-79-6	2,4,6-Tribromophenol	70%	33-118%
4165-60-0	Nitrobenzene-d5	66%	42-108%
321-60-8	2-Fluorobiphenyl	66%	40-106%
1718-51-0	Terphenyl-d14	75%	39-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-BS	T010228.D	1	10/28/13	FS	10/28/13	OP49187	ST491

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	17.0	17	10-69
95-57-8	2-Chlorophenol	50	28.6	57	52-98
59-50-7	4-Chloro-3-methyl phenol	50	33.4	67	54-103
120-83-2	2,4-Dichlorophenol	50	31.7	63	53-103
105-67-9	2,4-Dimethylphenol	50	29.8	60	43-90
51-28-5	2,4-Dinitrophenol	100	68.5	69	44-112
534-52-1	4,6-Dinitro-o-cresol	100	76.6	77	66-121
95-48-7	2-Methylphenol	50	25.0	50	43-90
	3&4-Methylphenol	100	46.7	47	36-88
88-75-5	2-Nitrophenol	50	31.6	63	53-102
100-02-7	4-Nitrophenol	100	24.9	25	18-62
87-86-5	Pentachlorophenol	100	84.5	85	61-115
108-95-2	Phenol	50	9.8	20	19-56
95-95-4	2,4,5-Trichlorophenol	50	37.9	76	62-109
88-06-2	2,4,6-Trichlorophenol	50	37.4	75	59-107
83-32-9	Acenaphthene	50	37.2	74	61-107
208-96-8	Acenaphthylene	50	37.7	75	60-104
62-53-3	Aniline	50	30.2	60	47-100
120-12-7	Anthracene	50	39.7	79	65-108
92-87-5	Benzidine	50	39.2	78	25-99
56-55-3	Benzo(a)anthracene	50	39.2	78	66-111
50-32-8	Benzo(a)pyrene	50	39.0	78	62-107
205-99-2	Benzo(b)fluoranthene	50	41.5	83	65-114
191-24-2	Benzo(g,h,i)perylene	50	39.3	79	66-116
207-08-9	Benzo(k)fluoranthene	50	38.5	77	65-114
101-55-3	4-Bromophenyl phenyl ether	50	32.1	64*	65-109
85-68-7	Butyl benzyl phthalate	50	39.9	80	65-112
100-51-6	Benzyl Alcohol	50	26.0	52	46-94
91-58-7	2-Chloronaphthalene	50	33.8	68	57-103
106-47-8	4-Chloroaniline	50	32.6	65	49-105
86-74-8	Carbazole	50	39.6	79	59-113
218-01-9	Chrysene	50	41.3	83	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	31.4	63	51-102
111-44-4	bis(2-Chloroethyl)ether	50	30.4	61	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	31.4	63	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	35.3	71	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-BS	T010228.D	1	10/28/13	FS	10/28/13	OP49187	ST491

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	27.2	54	48-97
122-66-7	1,2-Diphenylhydrazine	50	37.5	75	61-110
541-73-1	1,3-Dichlorobenzene	50	26.9	54	45-95
106-46-7	1,4-Dichlorobenzene	50	28.5	57	45-98
121-14-2	2,4-Dinitrotoluene	50	39.0	78	61-110
606-20-2	2,6-Dinitrotoluene	50	38.0	76	63-108
91-94-1	3,3'-Dichlorobenzidine	50	40.9	82	46-117
53-70-3	Dibenzo(a,h)anthracene	50	38.1	76	66-119
132-64-9	Dibenzofuran	50	37.3	75	61-106
84-74-2	Di-n-butyl phthalate	50	39.5	79	65-107
117-84-0	Di-n-octyl phthalate	50	44.1	88	62-118
84-66-2	Diethyl phthalate	50	38.5	77	64-108
131-11-3	Dimethyl phthalate	50	36.6	73	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	42.1	84	61-117
206-44-0	Fluoranthene	50	39.6	79	63-106
86-73-7	Fluorene	50	39.5	79	62-108
118-74-1	Hexachlorobenzene	50	37.2	74	63-108
87-68-3	Hexachlorobutadiene	50	29.4	59	42-102
77-47-4	Hexachlorocyclopentadiene	50	25.0	50	39-102
67-72-1	Hexachloroethane	50	27.4	55	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	33.3	67	64-119
78-59-1	Isophorone	50	31.0	62	43-87
90-12-0	1-Methylnaphthalene	50	31.5	63	53-102
91-57-6	2-Methylnaphthalene	50	30.6	61	51-102
88-74-4	2-Nitroaniline	50	41.4	83	54-128
99-09-2	3-Nitroaniline	50	41.0	82	56-106
100-01-6	4-Nitroaniline	50	39.3	79	55-120
91-20-3	Naphthalene	50	31.0	62	47-100
98-95-3	Nitrobenzene	50	30.4	61	50-104
62-75-9	N-Nitrosodimethylamine	50	17.7	35	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	31.5	63	52-104
86-30-6	N-Nitrosodiphenylamine	50	37.6	75	64-108
85-01-8	Phenanthrene	50	39.7	79	66-110
129-00-0	Pyrene	50	39.9	80	64-113
110-86-1	Pyridine	50	18.3	37	23-74
120-82-1	1,2,4-Trichlorobenzene	50	27.9	56	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-BS	T010228.D	1	10/28/13	FS	10/28/13	OP49187	ST491

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	33%	14-67%
4165-62-2	Phenol-d5	21%	10-50%
118-79-6	2,4,6-Tribromophenol	80%	33-118%
4165-60-0	Nitrobenzene-d5	66%	42-108%
321-60-8	2-Fluorobiphenyl	72%	40-106%
1718-51-0	Terphenyl-d14	86%	39-121%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-BS	T010274.D	1	10/30/13	FS	10/28/13	OP49187	ST493

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	13.7	14	10-69
95-57-8	2-Chlorophenol	50	27.0	54	52-98
59-50-7	4-Chloro-3-methyl phenol	50	30.6	61	54-103
120-83-2	2,4-Dichlorophenol	50	29.3	59	53-103
105-67-9	2,4-Dimethylphenol	50	26.9	54	43-90
51-28-5	2,4-Dinitrophenol	100	70.0	70	44-112
534-52-1	4,6-Dinitro-o-cresol	100	79.5	80	66-121
95-48-7	2-Methylphenol	50	24.1	48	43-90
	3&4-Methylphenol	100	43.6	44	36-88
88-75-5	2-Nitrophenol	50	29.8	60	53-102
100-02-7	4-Nitrophenol	100	21.2	21	18-62
87-86-5	Pentachlorophenol	100	79.4	79	61-115
108-95-2	Phenol	50	9.1	18*	19-56
95-95-4	2,4,5-Trichlorophenol	50	36.2	72	62-109
88-06-2	2,4,6-Trichlorophenol	50	35.6	71	59-107
83-32-9	Acenaphthene	50	35.9	72	61-107
208-96-8	Acenaphthylene	50	37.2	74	60-104
62-53-3	Aniline	50	28.9	58	47-100
120-12-7	Anthracene	50	38.2	76	65-108
92-87-5	Benzidine	50	28.5	57	25-99
56-55-3	Benzo(a)anthracene	50	37.8	76	66-111
50-32-8	Benzo(a)pyrene	50	37.3	75	62-107
205-99-2	Benzo(b)fluoranthene	50	38.3	77	65-114
191-24-2	Benzo(g,h,i)perylene	50	39.5	79	66-116
207-08-9	Benzo(k)fluoranthene	50	39.5	79	65-114
101-55-3	4-Bromophenyl phenyl ether	50	31.7	63*	65-109
85-68-7	Butyl benzyl phthalate	50	39.2	78	65-112
100-51-6	Benzyl Alcohol	50	25.2	50	46-94
91-58-7	2-Chloronaphthalene	50	33.0	66	57-103
106-47-8	4-Chloroaniline	50	30.9	62	49-105
86-74-8	Carbazole	50	37.5	75	59-113
218-01-9	Chrysene	50	40.4	81	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	30.3	61	51-102
111-44-4	bis(2-Chloroethyl)ether	50	30.4	61	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	31.0	62	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	35.2	70	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-BS	T010274.D	1	10/30/13	FS	10/28/13	OP49187	ST493

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	26.5	53	48-97
122-66-7	1,2-Diphenylhydrazine	50	38.2	76	61-110
541-73-1	1,3-Dichlorobenzene	50	25.9	52	45-95
106-46-7	1,4-Dichlorobenzene	50	27.4	55	45-98
121-14-2	2,4-Dinitrotoluene	50	36.6	73	61-110
606-20-2	2,6-Dinitrotoluene	50	36.6	73	63-108
91-94-1	3,3'-Dichlorobenzidine	50	41.0	82	46-117
53-70-3	Dibenzo(a,h)anthracene	50	38.3	77	66-119
132-64-9	Dibenzofuran	50	36.1	72	61-106
84-74-2	Di-n-butyl phthalate	50	37.7	75	65-107
117-84-0	Di-n-octyl phthalate	50	40.0	80	62-118
84-66-2	Diethyl phthalate	50	36.8	74	64-108
131-11-3	Dimethyl phthalate	50	35.5	71	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	38.9	78	61-117
206-44-0	Fluoranthene	50	38.3	77	63-106
86-73-7	Fluorene	50	37.8	76	62-108
118-74-1	Hexachlorobenzene	50	35.9	72	63-108
87-68-3	Hexachlorobutadiene	50	27.6	55	42-102
77-47-4	Hexachlorocyclopentadiene	50	23.3	47	39-102
67-72-1	Hexachloroethane	50	26.6	53	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	37.9	76	64-119
78-59-1	Isophorone	50	29.7	59	43-87
90-12-0	1-Methylnaphthalene	50	30.2	60	53-102
91-57-6	2-Methylnaphthalene	50	29.6	59	51-102
88-74-4	2-Nitroaniline	50	38.6	77	54-128
99-09-2	3-Nitroaniline	50	37.0	74	56-106
100-01-6	4-Nitroaniline	50	39.1	78	55-120
91-20-3	Naphthalene	50	29.6	59	47-100
98-95-3	Nitrobenzene	50	29.2	58	50-104
62-75-9	N-Nitrosodimethylamine	50	17.2	34	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	31.9	64	52-104
86-30-6	N-Nitrosodiphenylamine	50	37.8	76	64-108
85-01-8	Phenanthrene	50	38.7	77	66-110
129-00-0	Pyrene	50	38.9	78	64-113
110-86-1	Pyridine	50	17.2	34	23-74
120-82-1	1,2,4-Trichlorobenzene	50	26.2	52	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-BS	T010274.D	1	10/30/13	FS	10/28/13	OP49187	ST493

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	31%	14-67%
4165-62-2	Phenol-d5	19%	10-50%
118-79-6	2,4,6-Tribromophenol	77%	33-118%
4165-60-0	Nitrobenzene-d5	60%	42-108%
321-60-8	2-Fluorobiphenyl	68%	40-106%
1718-51-0	Terphenyl-d14	83%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-MS	T010281.D	1	10/30/13	FS	10/28/13	OP49187	ST493
OP49187-MSD	T010282.D	1	10/30/13	FS	10/28/13	OP49187	ST493
FA9276-3	T010280.D	1	10/30/13	FS	10/28/13	OP49187	ST493
FA9276-3	X031355.D	1	10/31/13	FS	10/28/13	OP49187	SX1488

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Compound	FA9276-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	49 U [a]		189	67.7	36	76.5	41	12	10-69/39
95-57-8	2-Chlorophenol	4.9 U		94.3	59.9	63	56.7	60	5	52-98/25
59-50-7	4-Chloro-3-methyl phenol	4.9 U		94.3	64.2	68	62.6	66	3	54-103/23
120-83-2	2,4-Dichlorophenol	4.9 U		94.3	61.1	65	59.6	63	2	53-103/26
105-67-9	2,4-Dimethylphenol	4.9 U		94.3	58.2	62	55.3	59	5	43-90/27
51-28-5	2,4-Dinitrophenol	25 U		189	138	73	142	75	3	44-112/25
534-52-1	4,6-Dinitro-o-cresol	9.8 U		189	149	79	150	80	1	66-121/23
95-48-7	2-Methylphenol	4.9 U		94.3	56.9	60	56.8	60	0	43-90/28
	3&4-Methylphenol	4.9 U		189	112	59	110	58	2	36-88/28
88-75-5	2-Nitrophenol	4.9 U		94.3	60.5	64	58.6	62	3	53-102/29
100-02-7	4-Nitrophenol	25 U		189	78.7	42	79.8	42	1	18-62/33
87-86-5	Pentachlorophenol	25 U		189	160	85	158	84	1	61-115/26
108-95-2	Phenol	4.9 U		94.3	30.9	33	31.0	33	0	19-56/35
95-95-4	2,4,5-Trichlorophenol	4.9 U		94.3	72.9	77	71.1	75	3	62-109/22
88-06-2	2,4,6-Trichlorophenol	4.9 U		94.3	72.2	77	70.6	75	2	59-107/23
83-32-9	Acenaphthene	4.9 U		94.3	73.5	78	71.6	76	3	61-107/22
208-96-8	Acenaphthylene	4.9 U		94.3	74.8	79	72.9	77	3	60-104/22
62-53-3	Aniline	4.9 U [a]		94.3	62.1	66	61.1	65	2	47-100/30
120-12-7	Anthracene	4.9 U		94.3	76.6	81	75.1	80	2	65-108/20
92-87-5	Benzidine	25 U [a]		94.3	22.6	24*	16.0	17*	34*	25-99/31
56-55-3	Benzo(a)anthracene	4.9 U		94.3	75.4	80	74.8	79	1	66-111/22
50-32-8	Benzo(a)pyrene	4.9 U		94.3	74.3	79	72.5	77	2	62-107/23
205-99-2	Benzo(b)fluoranthene	4.9 U		94.3	76.4	81	74.5	79	3	65-114/23
191-24-2	Benzo(g,h,i)perylene	4.9 U		94.3	78.1	83	75.5	80	3	66-116/23
207-08-9	Benzo(k)fluoranthene	4.9 U		94.3	78.3	83	77.4	82	1	65-114/24
101-55-3	4-Bromophenyl phenyl ether	4.9 U		94.3	61.4	65	61.2	65	0	65-109/23
85-68-7	Butyl benzyl phthalate	4.9 U		94.3	76.9	82	76.2	81	1	65-112/24
100-51-6	Benzyl Alcohol	4.9 U [a]		94.3	61.4	65	61.5	65	0	46-94/27
91-58-7	2-Chloronaphthalene	4.9 U		94.3	68.1	72	66.4	70	3	57-103/23
106-47-8	4-Chloroaniline	4.9 U [a]		94.3	61.9	66	62.3	66	1	49-105/27
86-74-8	Carbazole	4.9 U		94.3	75.6	80	73.5	78	3	59-113/21
218-01-9	Chrysene	4.9 U		94.3	79.9	85	78.1	83	2	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	4.9 U		94.3	62.1	66	59.4	63	4	51-102/28
111-44-4	bis(2-Chloroethyl)ether	4.9 U		94.3	63.3	67	59.4	63	6	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	4.9 U		94.3	63.9	68	60.8	64	5	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	4.9 U		94.3	69.4	74	67.2	71	3	62-105/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-MS	T010281.D	1	10/30/13	FS	10/28/13	OP49187	ST493
OP49187-MSD	T010282.D	1	10/30/13	FS	10/28/13	OP49187	ST493
FA9276-3	T010280.D	1	10/30/13	FS	10/28/13	OP49187	ST493
FA9276-3	X031355.D	1	10/31/13	FS	10/28/13	OP49187	SX1488

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Compound	FA9276-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	4.9 U	a	94.3	59.2	63	56.1	59	5	48-97/24
122-66-7	1,2-Diphenylhydrazine	4.9 U	a	94.3	72.8	77	73.1	77	0	61-110/24
541-73-1	1,3-Dichlorobenzene	4.9 U	a	94.3	58.9	62	55.6	59	6	45-95/25
106-46-7	1,4-Dichlorobenzene	4.9 U	a	94.3	61.4	65	58.5	62	5	45-98/25
121-14-2	2,4-Dinitrotoluene	4.9 U		94.3	72.3	77	70.3	75	3	61-110/21
606-20-2	2,6-Dinitrotoluene	4.9 U		94.3	72.3	77	70.3	75	3	63-108/21
91-94-1	3,3'-Dichlorobenzidine	4.9 U		94.3	78.3	83	73.2	78	7	46-117/29
53-70-3	Dibenzo(a,h)anthracene	4.9 U		94.3	74.6	79	72.7	77	3	66-119/24
132-64-9	Dibenzofuran	4.9 U		94.3	73.3	78	71.3	76	3	61-106/21
84-74-2	Di-n-butyl phthalate	4.9 U		94.3	75.6	80	72.5	77	4	65-107/21
117-84-0	Di-n-octyl phthalate	4.9 U		94.3	77.7	82	78.4	83	1	62-118/24
84-66-2	Diethyl phthalate	4.9 U		94.3	73.0	77	70.7	75	3	64-108/21
131-11-3	Dimethyl phthalate	4.9 U		94.3	70.6	75	68.6	73	3	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	4.9 U		94.3	77.2	82	76.6	81	1	61-117/23
206-44-0	Fluoranthene	4.9 U		94.3	78.1	83	74.5	79	5	63-106/21
86-73-7	Fluorene	4.9 U		94.3	77.3	82	74.2	79	4	62-108/20
118-74-1	Hexachlorobenzene	4.9 U		94.3	72.0	76	70.4	75	2	63-108/22
87-68-3	Hexachlorobutadiene	4.9 U		94.3	62.1	66	60.5	64	3	42-102/28
77-47-4	Hexachlorocyclopentadiene	4.9 U		94.3	50.6	54	48.2	51	5	39-102/29
67-72-1	Hexachloroethane	4.9 U		94.3	62.5	66	60.0	64	4	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	4.9 U		94.3	75.4	80	70.2	74	7	64-119/24
78-59-1	Isophorone	4.9 U		94.3	59.6	63	57.1	61	4	43-87/25
90-12-0	1-Methylnaphthalene	4.9 U	a	94.3	62.5	66	60.6	64	3	53-102/27
91-57-6	2-Methylnaphthalene	4.9 U		94.3	61.1	65	59.9	63	2	51-102/26
88-74-4	2-Nitroaniline	4.9 U		94.3	76.8	81	75.0	80	2	54-128/24
99-09-2	3-Nitroaniline	4.9 U		94.3	73.6	78	72.0	76	2	56-106/27
100-01-6	4-Nitroaniline	4.9 U		94.3	77.1	82	73.9	78	4	55-120/24
91-20-3	Naphthalene	4.9 U		94.3	63.6	67	61.6	65	3	47-100/29
98-95-3	Nitrobenzene	4.9 U		94.3	60.1	64	57.6	61	4	50-104/28
62-75-9	N-Nitrosodimethylamine	4.9 U	a	94.3	52.8	56	51.1	54	3	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	4.9 U		94.3	64.3	68	61.9	66	4	52-104/25
86-30-6	N-Nitrosodiphenylamine	4.9 U		94.3	73.0	77	72.8	77	0	64-108/23
85-01-8	Phenanthrene	4.9 U		94.3	77.3	82	75.2	80	3	66-110/21
129-00-0	Pyrene	4.9 U		94.3	74.0	78	74.6	79	1	64-113/23
110-86-1	Pyridine	9.8 U	a	94.3	49.0	52	49.7	53	1	23-74/34
120-82-1	1,2,4-Trichlorobenzene	4.9 U	a	94.3	57.5	61	55.8	59	3	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49187-MS	T010281.D	1	10/30/13	FS	10/28/13	OP49187	ST493
OP49187-MSD	T010282.D	1	10/30/13	FS	10/28/13	OP49187	ST493
FA9276-3	T010280.D	1	10/30/13	FS	10/28/13	OP49187	ST493
FA9276-3	X031355.D	1	10/31/13	FS	10/28/13	OP49187	SX1488

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9288-1, FA9288-3

CAS No.	Surrogate Recoveries	MS	MSD	FA9276-3	FA9276-3	Limits
367-12-4	2-Fluorophenol	49%	47%	27%	29%	14-67%
4165-62-2	Phenol-d5	35%	35%	16%	18%	10-50%
118-79-6	2,4,6-Tribromophenol	80%	76%	65%	69%	33-118%
4165-60-0	Nitrobenzene-d5	67%	62%	55%	57%	42-108%
321-60-8	2-Fluorobiphenyl	74%	69%	56%	56%	40-106%
1718-51-0	Terphenyl-d14	85%	81%	75%	76%	39-121%

(a) Result is from Run #2.

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5084-MB	CD124542.D	1	10/25/13	CP	n/a	n/a	GCD5084

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9288-1, FA9288-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	76%	70-131%
98-08-8	aaa-Trifluorotoluene	90%	69-143%

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5084-BS	CD124541.D	1	10/25/13	CP	n/a	n/a	GCD5084

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9288-1, FA9288-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.428	107	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	85%	70-131%
98-08-8	aaa-Trifluorotoluene	106%	69-143%

8.2.1

8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9288-1MS	CD124549.D	1	10/25/13	CP	n/a	n/a	GCD5084
FA9288-1MSD	CD124550.D	1	10/25/13	CP	n/a	n/a	GCD5084
FA9288-1	CD124548.D	1	10/25/13	CP	n/a	n/a	GCD5084

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9288-1, FA9288-3

CAS No.	Compound	FA9288-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.0967	J	0.4	0.508	103	0.504	102	1	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA9288-1	Limits
460-00-4	4-Bromofluorobenzene	91%	96%	85%	70-131%
98-08-8	aaa-Trifluorotoluene	106%	108%	97%	69-143%

8.3.1

8

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49193-MB	YY38914.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9288-1, FA9288-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	55%	50-131%

Blank Spike Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49193-BS	YY38913.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9288-1, FA9288-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.601	60	56-123
	TPH (> C22-C36)	1	0.763	76	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	64%	50-131%

9.2.1

9

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9288
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49193-MS	YY38916.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
OP49193-MSD	YY38917.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
FA9288-1	YY38915.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9288-1, FA9288-3

CAS No.	Compound	FA9288-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	1.76		1.85	1.77	1*	2.64	48*	39*	56-123/33
	TPH (> C22-C36)	0.101	J	1.85	1.19	59*	1.56	79	27	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA9288-1	Limits
84-15-1	o-Terphenyl	49%* [a]	69%	72%	50-131%

(a) Outside control limits.

9.3.1

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA9288
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26255
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:					11/05/13		11/05/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	15	15				
Antimony	6.0	1.3	1.3				
Arsenic	10	1.6	2.5				
Barium	200	1	1				
Beryllium	4.0	.5	.5				
Cadmium	5.0	.5	.5				
Calcium	1000	50	50				
Chromium	10	1.8	2				
Cobalt	50	.5	.5				
Copper	25	1	1				
Iron	300	29	29	19.7	<300	1.2	<300
Lead	5.0	1.1	1.1				
Magnesium	5000	74	74				
Manganese	15	.7	.7	0.20	<15	0.10	<15
Molybdenum	50	.6	1				
Nickel	40	.5	.5				
Potassium	10000	200	200				
Selenium	10	2	2				
Silver	10	.5	.5				
Sodium	10000	500	500				
Strontium	10	.5	.5				
Thallium	10	1.3	1.3				
Tin	50	.7	1.8				
Titanium	10	.9	1				
Vanadium	50	.5	1				
Zinc	20	3	5				

Associated samples MP26255: FA9288-1, FA9288-3, FA9288-1F, FA9288-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9288
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26255
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Metal	FA9260-1 Original	DUP	RPD	QC Limits	FA9260-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Prep Date:			11/05/13					11/05/13	
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron	231	213	8.1	0-20	231	26500	26000	101.0	70-130
Lead	anr								
Magnesium									
Manganese	59.8	58.3	2.5	0-20	59.8	566	500	101.2	70-130
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP26255: FA9288-1, FA9288-3, FA9288-1F, FA9288-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9288
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26255
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/05/13

Metal	FA9260-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	231	26700	26000	101.8	0.8	20
Lead	anr					
Magnesium						
Manganese	59.8	570	500	102.0	0.7	20
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP26255: FA9288-1, FA9288-3, FA9288-1F, FA9288-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA9288
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26255
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/05/13

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	26700	26000	102.7	85-115
Lead	anr			
Magnesium				
Manganese	515	500	103.0	85-115
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP26255: FA9288-1, FA9288-3, FA9288-1F, FA9288-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA9288
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26255
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/05/13

Metal	FA9260-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	231	0.00	100.0(a)	0-10
Lead	anr			
Magnesium				
Manganese	59.8	57.9	3.2	0-10
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP26255: FA9288-1, FA9288-3, FA9288-1F, FA9288-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA9288
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26255
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/05/13

Metal	Sample ml	Final ml	FA9260-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10	231	226.38	3143	0.2	150	3000	97.2	85-115
Lead										
Magnesium										
Manganese	9.8	10	59.8	58.604	110.7	0.2	2.5	50	104.2	85-115
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP26255: FA9288-1, FA9288-3, FA9288-1F, FA9288-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9288
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP22741/GN58530	2.0	0.0	mg/l	198	168	84.7*(a)	85-115%
Chemical Oxygen Demand	GP22734/GN58407	20	0.0	mg/l	50.0	47.2	94.4	87-122%
Chemical Oxygen Demand	GP22735/GN58408	20	0.0	mg/l	750	773	103.0	87-122%
Chloride	GP22737/GN58416	2.0	0.0	mg/l	50	50.7	101.4	90-110%
Fluoride	GP22737/GN58416	0.20	0.0	mg/l	2.5	2.57	102.8	90-110%
Iron, Ferrous	GN58401	0.10	0.0	mg/l	.500	0.51	102.0	82-115%
Nitrogen, Ammonia	GP22816/GN58613	0.10	0.0	mg/l	2.5	2.58	103.2	90-110%
Nitrogen, Nitrate	GP22737/GN58416	0.10	0.0	mg/l	2.5	2.54	101.6	90-110%
Nitrogen, Nitrite	GP22737/GN58416	0.10	0.0	mg/l	2.5	2.54	101.6	90-110%
Nitrogen, Total Kjeldahl	GP22754/GN58492	0.53	0.0	mg/l	2.63	2.78	105.9	90-110%
Nitrogen, Total Kjeldahl	GP22755/GN58493	0.53	0.0	mg/l	2.63	2.79	106.3	90-110%
Solids, Total Dissolved	GN58412	100	0.0	mg/l				
Sulfate	GP22737/GN58416	2.0	0.0	mg/l	50	50.8	101.6	90-110%

Associated Samples:
Batch GN58401: FA9288-1, FA9288-3
Batch GN58412: FA9288-1, FA9288-3
Batch GN58427: FA9288-1, FA9288-3
Batch GP22734: FA9288-3
Batch GP22735: FA9288-1
Batch GP22737: FA9288-1, FA9288-3
Batch GP22741: FA9288-1, FA9288-3
Batch GP22754: FA9288-1
Batch GP22755: FA9288-3
Batch GP22816: FA9288-1, FA9288-3
(*) Outside of QC limits
(a) Spike recovery outside of acceptable QC criteria.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9288
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP22741/GN58530	FA9288-1	mg/l	4.0 U	0.0	161.9(a)	0-30%
Iron, Ferrous	GN58401	FA9288-1	mg/l	0.030 U	0.0	142.0(a)	0-31%
Solids, Total Dissolved	GN58412	FA9277-5	mg/l	168	170	1.2	0-5%

Associated Samples:
Batch GN58401: FA9288-1, FA9288-3
Batch GN58412: FA9288-1, FA9288-3
Batch GP22741: FA9288-1, FA9288-3
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9288
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP22734/GN58407	FA9130-1	mg/l	47.2	50.0	91.9	89.4	87-122%
Chemical Oxygen Demand	GP22735/GN58408	FA9288-1	mg/l	591	750	1180	78.8*(a)	87-122%
Chloride	GP22737/GN58416	FA9277-2	mg/l	2.8	50	51.8	98.0	90-110%
Fluoride	GP22737/GN58416	FA9277-2	mg/l	0.29	2.5	3.0	108.4	90-110%
Nitrogen, Ammonia	GP22816/GN58613	FA9328-1	mg/l	0.044	2.5	2.6	102.2	90-110%
Nitrogen, Nitrate	GP22737/GN58416	FA9277-2	mg/l	0.67	2.5	3.2	101.2	90-110%
Nitrogen, Nitrite	GP22737/GN58416	FA9277-2	mg/l	0.050 U	2.5	2.5	100.0	90-110%
Nitrogen, Total Kjeldahl	GP22754/GN58492	FA9375-1	mg/l	1.0	2.63	3.7	102.9	90-110%
Nitrogen, Total Kjeldahl	GP22755/GN58493	FA9288-3	mg/l	1.2	2.63	3.6	88.8N(a)	90-110%
Sulfate	GP22737/GN58416	FA9277-2	mg/l	17.2	50	65.6	96.8	90-110%

Associated Samples:
Batch GN58427: FA9288-1, FA9288-3
Batch GP22734: FA9288-3
Batch GP22735: FA9288-1
Batch GP22737: FA9288-1, FA9288-3
Batch GP22754: FA9288-1
Batch GP22755: FA9288-3
Batch GP22816: FA9288-1, FA9288-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9288
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chemical Oxygen Demand	GP22734/GN58407	FA9130-1	mg/l	47.2	50.0	89.4	2.7	26%
Chemical Oxygen Demand	GP22735/GN58408	FA9288-1	mg/l	591	750	1200	1.9	26%
Chloride	GP22737/GN58416	FA9277-2	mg/l	2.8	50	51.6	0.4	20%
Fluoride	GP22737/GN58416	FA9277-2	mg/l	0.29	2.5	3.1	3.3	20%
Nitrogen, Ammonia	GP22816/GN58613	FA9328-1	mg/l	0.044	2.5	2.6	0.0	20%
Nitrogen, Nitrate	GP22737/GN58416	FA9277-2	mg/l	0.67	2.5	3.2	0.0	20%
Nitrogen, Nitrite	GP22737/GN58416	FA9277-2	mg/l	0.050 U	2.5	2.5	0.0	20%
Nitrogen, Total Kjeldahl	GP22754/GN58492	FA9375-1	mg/l	1.0	2.63	3.7	0.0	20%
Nitrogen, Total Kjeldahl	GP22755/GN58493	FA9288-3	mg/l	1.2	2.63	3.5	0.9	20%
Sulfate	GP22737/GN58416	FA9277-2	mg/l	17.2	50	65.6	0.0	20%

Associated Samples:
Batch GN58427: FA9288-1, FA9288-3
Batch GP22734: FA9288-3
Batch GP22735: FA9288-1
Batch GP22737: FA9288-1, FA9288-3
Batch GP22754: FA9288-1
Batch GP22755: FA9288-3
Batch GP22816: FA9288-1, FA9288-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Southeast ACCUTEST LABORATORIES

11/11/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA9327

Sampling Date: 10/22/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **57**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

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Accutest LabLink@146533 10:07 11-Nov-2013

Sample Summary

Bhate Environmental

Job No: FA9327

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA9327-1	10/22/13	10:00	DMZB	10/23/13	SO	Soil	SS61-SB68C-27
FA9327-2	10/22/13	11:30	DMZB	10/23/13	SO	Soil	SS61-SB69C-30
FA9327-3	10/22/13	00:00	DMZB	10/23/13	SO	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA9327

Site: Holloman AFB; SS61 VCM **Report Date** 11/7/2013 1:44:53 PM

2 Samples and 1 Trip Blank were collected on 10/22/2013 and were received at Accutest SE on 10/23/2013 properly preserved, at 2.2 Deg. C and intact. These Samples received an Accutest job number of FA9327. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO **Batch ID:** VH3124

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9237-11MS, FA9237-11MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,1-Dichloroethylene, 1,1-Dichloropropene, Carbon disulfide, cis-1,3-Dichloropropene, Hexachlorobutadiene, Hexane, Naphthalene, Styrene, Trichlorofluoromethane, Vinyl chloride are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethylene, 1,1-Dichloropropene, Carbon disulfide, cis-1,3-Dichloropropene, Dibromochloromethane, Dichlorodifluoromethane, Hexachlorobutadiene, Hexane, n-Butylbenzene, Naphthalene, Styrene, Tetrachloroethylene, Vinyl chloride are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Dichlorodifluoromethane are outside control limits for sample FA9237-11MSD. Probable cause is due to sample non-homogeneity.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP49247

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9292-1RMS, FA9292-1RMSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Benzidine are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 4,6-Dinitro-o-cresol, Benzidine, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Chrysene, Diethyl phthalate, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for 3,3'-Dichlorobenzidine, Aniline, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Di-n-octyl phthalate, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene are outside control limits for sample OP49247-MSD. Probable cause is due to sample non-homogeneity.

Volatiles by GC By Method SW846 8015C

Matrix: SO **Batch ID:** GQR3391

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9327-2MS, FA9327-2MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: SO **Batch ID:** OP49288

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9516-8MS, FA9516-8MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for TPH (>C22-C36), TPH (C10-C22) are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN58521

Sample(s) FA9327-2DUP was used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN58637

Sample(s) FA9581-2DUP was used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: November 7, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA9327
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/22/13

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA9327-1	**SS61-SB68C-27**					
Carbon disulfide		3.5 J	5.9	2.4	ug/kg	SW846 8260B
FA9327-2	**SS61-SB69C-30**					
1,2-Dichloroethane		3.3 J	3.9	0.93	ug/kg	SW846 8260B
TPH (> C22-C36)		6.21 J	11	4.3	mg/kg	SW846 8015C
FA9327-3	**TRIP BLANK**					

No hits reported in this sample.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-SB68C-27		
Lab Sample ID:	FA9327-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	61.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0082989.D	1	10/25/13	EP	n/a	n/a	VH3124
Run #2							

	Initial Weight
Run #1	6.91 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	59	24	ug/kg	
107-02-8	Acrolein	ND	30	10	ug/kg	
107-13-1	Acrylonitrile	ND	30	12	ug/kg	
71-43-2	Benzene	ND	5.9	1.2	ug/kg	
108-86-1	Bromobenzene	ND	5.9	1.3	ug/kg	
74-97-5	Bromochloromethane	ND	5.9	1.7	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	1.7	ug/kg	
75-25-2	Bromoform	ND	5.9	1.2	ug/kg	
104-51-8	n-Butylbenzene	ND	5.9	1.5	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.9	1.4	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.9	1.4	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	1.2	ug/kg	
75-00-3	Chloroethane	ND	5.9	2.4	ug/kg	
67-66-3	Chloroform	ND	5.9	1.2	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.9	1.2	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.9	1.4	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	30	12	ug/kg	
75-15-0	Carbon disulfide	3.5	5.9	2.4	ug/kg	J
56-23-5	Carbon tetrachloride	ND	5.9	1.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.9	1.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.9	1.4	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.9	1.2	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.9	3.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.9	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.9	1.4	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.9	1.2	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.9	1.2	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.9	1.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	1.2	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.9	1.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.9	1.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	1.2	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68C-27		
Lab Sample ID:	FA9327-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	61.0
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	5.9	1.2	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.9	1.3	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.9	1.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.9	1.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.9	1.3	ug/kg	
591-78-6	2-Hexanone	ND	30	5.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.9	2.4	ug/kg	
110-54-3	Hexane	ND	5.9	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.9	1.6	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.9	1.6	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	30	5.9	ug/kg	
74-83-9	Methyl bromide	ND	5.9	2.4	ug/kg	
74-87-3	Methyl chloride	ND	5.9	2.5	ug/kg	
74-95-3	Methylene bromide	ND	5.9	1.2	ug/kg	
75-09-2	Methylene chloride	ND	12	5.4	ug/kg	
78-93-3	Methyl ethyl ketone	ND	30	5.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.9	1.2	ug/kg	
91-20-3	Naphthalene	ND	5.9	2.4	ug/kg	
103-65-1	n-Propylbenzene	ND	5.9	1.2	ug/kg	
100-42-5	Styrene	ND	5.9	1.2	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.9	1.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.9	1.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	1.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.9	1.2	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.9	1.2	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.9	1.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.9	1.4	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.9	1.3	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.9	1.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.9	1.4	ug/kg	
108-88-3	Toluene	ND	5.9	1.2	ug/kg	
79-01-6	Trichloroethylene	ND	5.9	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.9	2.4	ug/kg	
75-01-4	Vinyl chloride	ND	5.9	1.2	ug/kg	
108-05-4	Vinyl Acetate	ND	30	4.9	ug/kg	
	m,p-Xylene	ND	12	2.4	ug/kg	
95-47-6	o-Xylene	ND	5.9	1.2	ug/kg	

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68C-27		
Lab Sample ID:	FA9327-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	61.0
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		75-124%
2037-26-5	Toluene-D8	90%		75-126%
460-00-4	4-Bromofluorobenzene	86%		71-133%
17060-07-0	1,2-Dichloroethane-D4	109%		72-135%

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68C-27		
Lab Sample ID:	FA9327-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	61.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L066562.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1400	270	ug/kg	
95-57-8	2-Chlorophenol	ND	270	32	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	270	30	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	270	30	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	270	40	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1400	270	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	540	110	ug/kg	
95-48-7	2-Methylphenol	ND	270	34	ug/kg	
	3&4-Methylphenol	ND	270	56	ug/kg	
88-75-5	2-Nitrophenol	ND	270	41	ug/kg	
100-02-7	4-Nitrophenol	ND	1400	220	ug/kg	
87-86-5	Pentachlorophenol	ND	1400	220	ug/kg	
108-95-2	Phenol	ND	270	44	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	270	32	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	270	35	ug/kg	
83-32-9	Acenaphthene	ND	270	32	ug/kg	
208-96-8	Acenaphthylene	ND	270	31	ug/kg	
62-53-3	Aniline	ND	270	87	ug/kg	
120-12-7	Anthracene	ND	270	27	ug/kg	
92-87-5	Benzidine	ND	2700	630	ug/kg	
56-55-3	Benzo(a)anthracene	ND	270	27	ug/kg	
50-32-8	Benzo(a)pyrene	ND	270	27	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	270	27	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	270	27	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	270	32	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	34	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	54	ug/kg	
100-51-6	Benzyl Alcohol	ND	270	54	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	35	ug/kg	
106-47-8	4-Chloroaniline	ND	270	41	ug/kg	
86-74-8	Carbazole	ND	270	30	ug/kg	
218-01-9	Chrysene	ND	270	27	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68C-27		
Lab Sample ID:	FA9327-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	61.0
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	270	38	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	37	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	31	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	28	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	270	27	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	270	30	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	35	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	29	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	270	28	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	270	33	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	270	45	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	270	27	ug/kg	
132-64-9	Dibenzofuran	ND	270	27	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	540	54	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	54	ug/kg	
84-66-2	Diethyl phthalate	ND	540	54	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	54	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	540	54	ug/kg	
206-44-0	Fluoranthene	ND	270	27	ug/kg	
86-73-7	Fluorene	ND	270	30	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	27	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	30	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	270	37	ug/kg	
67-72-1	Hexachloroethane	ND	270	31	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	270	27	ug/kg	
78-59-1	Isophorone	ND	270	30	ug/kg	
90-12-0	1-Methylnaphthalene	ND	270	37	ug/kg	
91-57-6	2-Methylnaphthalene	ND	270	31	ug/kg	
88-74-4	2-Nitroaniline	ND	270	40	ug/kg	
99-09-2	3-Nitroaniline	ND	270	38	ug/kg	
100-01-6	4-Nitroaniline	ND	270	58	ug/kg	
91-20-3	Naphthalene	ND	270	27	ug/kg	
98-95-3	Nitrobenzene	ND	270	39	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	540	39	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	30	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	54	ug/kg	
85-01-8	Phenanthrene	ND	270	27	ug/kg	
129-00-0	Pyrene	ND	270	27	ug/kg	
110-86-1	Pyridine	ND	540	62	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	29	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68C-27		
Lab Sample ID:	FA9327-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	61.0
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		40-102%
4165-62-2	Phenol-d5	67%		41-100%
118-79-6	2,4,6-Tribromophenol	80%		42-108%
4165-60-0	Nitrobenzene-d5	70%		40-105%
321-60-8	2-Fluorobiphenyl	76%		43-107%
1718-51-0	Terphenyl-d14	91%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68C-27		
Lab Sample ID:	FA9327-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8015C	**Percent Solids:**	61.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR079608.D	1	10/28/13	MM	n/a	n/a	GQR3391
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.31 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	8.8	4.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	116%		56-149%
98-08-8	aaa-Trifluorotoluene	131%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB68C-27		
Lab Sample ID:	FA9327-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	61.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38956.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	14	5.5	mg/kg	
	TPH (> C22-C36)	ND	14	5.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	103%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69C-30		
Lab Sample ID:	FA9327-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	77.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0082990.D	1	10/25/13	EP	n/a	n/a	VH3124
Run #2							

	Initial Weight
Run #1	8.26 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	16	ug/kg	
107-02-8	Acrolein	ND	19	6.7	ug/kg	
107-13-1	Acrylonitrile	ND	19	7.8	ug/kg	
71-43-2	Benzene	ND	3.9	0.78	ug/kg	
108-86-1	Bromobenzene	ND	3.9	0.84	ug/kg	
74-97-5	Bromochloromethane	ND	3.9	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	3.9	1.1	ug/kg	
75-25-2	Bromoform	ND	3.9	0.78	ug/kg	
104-51-8	n-Butylbenzene	ND	3.9	1.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.9	0.94	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.9	0.92	ug/kg	
108-90-7	Chlorobenzene	ND	3.9	0.78	ug/kg	
75-00-3	Chloroethane	ND	3.9	1.6	ug/kg	
67-66-3	Chloroform	ND	3.9	0.78	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.9	0.78	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.9	0.89	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	19	7.8	ug/kg	
75-15-0	Carbon disulfide	ND	3.9	1.6	ug/kg	
56-23-5	Carbon tetrachloride	ND	3.9	0.89	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.9	0.78	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.9	0.95	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.9	0.78	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.9	1.9	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.9	0.78	ug/kg	
107-06-2	1,2-Dichloroethane	3.3	3.9	0.93	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	3.9	0.78	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.9	0.78	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.9	0.78	ug/kg	
124-48-1	Dibromochloromethane	ND	3.9	0.78	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.9	0.78	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.9	0.78	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.9	0.78	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69C-30		
Lab Sample ID:	FA9327-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	77.9
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	3.9	0.78	ug/kg	
95-50-1	o-Dichlorobenzene	ND	3.9	0.85	ug/kg	
106-46-7	p-Dichlorobenzene	ND	3.9	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.9	0.78	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.9	0.78	ug/kg	
100-41-4	Ethylbenzene	ND	3.9	0.85	ug/kg	
591-78-6	2-Hexanone	ND	19	3.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.9	1.6	ug/kg	
110-54-3	Hexane	ND	3.9	1.8	ug/kg	
98-82-8	Isopropylbenzene	ND	3.9	1.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.9	1.0	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	19	3.9	ug/kg	
74-83-9	Methyl bromide	ND	3.9	1.6	ug/kg	
74-87-3	Methyl chloride	ND	3.9	1.6	ug/kg	
74-95-3	Methylene bromide	ND	3.9	0.81	ug/kg	
75-09-2	Methylene chloride	ND	7.8	3.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	19	3.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.9	0.78	ug/kg	
91-20-3	Naphthalene	ND	3.9	1.6	ug/kg	
103-65-1	n-Propylbenzene	ND	3.9	0.80	ug/kg	
100-42-5	Styrene	ND	3.9	0.78	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.9	0.83	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.9	0.78	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.9	0.78	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.9	0.78	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.9	0.82	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.9	1.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.9	0.92	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.9	0.84	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.9	0.82	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.9	0.89	ug/kg	
108-88-3	Toluene	ND	3.9	0.78	ug/kg	
79-01-6	Trichloroethylene	ND	3.9	0.78	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.9	1.6	ug/kg	
75-01-4	Vinyl chloride	ND	3.9	0.78	ug/kg	
108-05-4	Vinyl Acetate	ND	19	3.2	ug/kg	
	m,p-Xylene	ND	7.8	1.6	ug/kg	
95-47-6	o-Xylene	ND	3.9	0.78	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69C-30		
Lab Sample ID:	FA9327-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	77.9
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		75-124%
2037-26-5	Toluene-D8	89%		75-126%
460-00-4	4-Bromofluorobenzene	90%		71-133%
17060-07-0	1,2-Dichloroethane-D4	108%		72-135%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69C-30		
Lab Sample ID:	FA9327-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	77.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L066563.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1100	210	ug/kg	
95-57-8	2-Chlorophenol	ND	210	25	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	24	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	31	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	210	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	420	85	ug/kg	
95-48-7	2-Methylphenol	ND	210	26	ug/kg	
	3&4-Methylphenol	ND	210	44	ug/kg	
88-75-5	2-Nitrophenol	ND	210	32	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	170	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	170	ug/kg	
108-95-2	Phenol	ND	210	35	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	27	ug/kg	
83-32-9	Acenaphthene	ND	210	25	ug/kg	
208-96-8	Acenaphthylene	ND	210	25	ug/kg	
62-53-3	Aniline	ND	210	68	ug/kg	
120-12-7	Anthracene	ND	210	21	ug/kg	
92-87-5	Benzidine	ND	2100	500	ug/kg	
56-55-3	Benzo(a)anthracene	ND	210	21	ug/kg	
50-32-8	Benzo(a)pyrene	ND	210	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	210	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	210	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	210	25	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	210	27	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	210	42	ug/kg	
100-51-6	Benzyl Alcohol	ND	210	42	ug/kg	
91-58-7	2-Chloronaphthalene	ND	210	27	ug/kg	
106-47-8	4-Chloroaniline	ND	210	32	ug/kg	
86-74-8	Carbazole	ND	210	24	ug/kg	
218-01-9	Chrysene	ND	210	21	ug/kg	

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RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69C-30		
Lab Sample ID:	FA9327-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	77.9
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	210	30	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	29	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	24	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	21	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	24	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	23	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	22	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	26	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	210	36	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	210	21	ug/kg	
132-64-9	Dibenzofuran	ND	210	22	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	420	42	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	210	42	ug/kg	
84-66-2	Diethyl phthalate	ND	420	42	ug/kg	
131-11-3	Dimethyl phthalate	ND	210	42	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	420	42	ug/kg	
206-44-0	Fluoranthene	ND	210	21	ug/kg	
86-73-7	Fluorene	ND	210	23	ug/kg	
118-74-1	Hexachlorobenzene	ND	210	21	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	23	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	29	ug/kg	
67-72-1	Hexachloroethane	ND	210	24	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	210	21	ug/kg	
78-59-1	Isophorone	ND	210	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	210	29	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	25	ug/kg	
88-74-4	2-Nitroaniline	ND	210	31	ug/kg	
99-09-2	3-Nitroaniline	ND	210	30	ug/kg	
100-01-6	4-Nitroaniline	ND	210	45	ug/kg	
91-20-3	Naphthalene	ND	210	21	ug/kg	
98-95-3	Nitrobenzene	ND	210	31	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	420	30	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	23	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	42	ug/kg	
85-01-8	Phenanthrene	ND	210	21	ug/kg	
129-00-0	Pyrene	ND	210	21	ug/kg	
110-86-1	Pyridine	ND	420	49	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	23	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69C-30		
Lab Sample ID:	FA9327-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	77.9
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		40-102%
4165-62-2	Phenol-d5	70%		41-100%
118-79-6	2,4,6-Tribromophenol	78%		42-108%
4165-60-0	Nitrobenzene-d5	71%		40-105%
321-60-8	2-Fluorobiphenyl	76%		43-107%
1718-51-0	Terphenyl-d14	88%		45-119%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69C-30		
Lab Sample ID:	FA9327-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8015C	**Percent Solids:**	77.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR079609.D	1	10/28/13	MM	n/a	n/a	GQR3391
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.95 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	134%		56-149%
98-08-8	aaa-Trifluorotoluene	123%		66-132%

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB69C-30		
Lab Sample ID:	FA9327-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/23/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	77.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38957.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433
Run #2							

	Initial Weight	Final Volume
Run #1	29.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	11	4.3	mg/kg	
	TPH (> C22-C36)	6.21	11	4.3	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9327-3	**Date Sampled:**	10/22/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0082991.D	1	10/25/13	EP	n/a	n/a	VH3124
Run #2							

	Initial Weight
Run #1	5.00 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9327-3	**Date Sampled:**	10/22/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9327-3	**Date Sampled:**	10/22/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		75-124%
2037-26-5	Toluene-D8	89%		75-126%
460-00-4	4-Bromofluorobenzene	89%		71-133%
17060-07-0	1,2-Dichloroethane-D4	106%		72-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA9327

Page: 1 of 1
Project No: 9100133
COC Number(1): 10222013-04
LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (Soil - Semiannual # 3, Oct 2013)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO							Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
1)	SS61-SB68C-27	SS61-SB68	10/22/13	1000	26-27	N	1	SO	5	X	X	X	X										4
2)	SS61-SB69C-30	SS61-SB69	10/22/13	1130	29-30	N	1	SO	5	X	X	X	X										4
3)	Trip Blank				-	TB	1	SQ	3	X													4
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS:

Custody Transfers Prior to Receipt by Laboratory

Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/22/13	1400	1. [signature]		
2. [signature]	10-22-13	930	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7969 6691 8283
Analytical Lab: Accutest Labs
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

2-2

FA9327: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA9327 CLIENT: B HATE PROJECT: SS-61

DATE/TIME RECEIVED: 10-23-13 930 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7969 6691 8283

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [x] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM____ 5-GRAM____

NUMBER OF 5035 FIELD KITS ? 2

NUMBER OF LAB FILTERED METALS ? ____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 1.8
- [ ] CORRECTED TEMPS: 2.2

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE BW 10-23-13 REVIEWER SIGNATURE/DATE JC 10.23-13

NF 12/10 receipt confirmation 122910.xls

FA9327: Chain of Custody

Page 2 of 2

Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3124-MB	H0082967.D	1	10/25/13	EP	n/a	n/a	VH3124

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9327-1, FA9327-2, FA9327-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3124-MB	H0082967.D	1	10/25/13	EP	n/a	n/a	VH3124

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9327-1, FA9327-2, FA9327-3

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3124-MB	H0082967.D	1	10/25/13	EP	n/a	n/a	VH3124

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9327-1, FA9327-2, FA9327-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	87%	75-124%
2037-26-5	Toluene-D8	89%	75-126%
460-00-4	4-Bromofluorobenzene	91%	71-133%
17060-07-0	1,2-Dichloroethane-D4	90%	72-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile [a]		0	ug/kg	

(a) No TICs detected.

Blank Spike Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3124-BS	H0082966.D	1	10/25/13	EP	n/a	n/a	VH3124

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9327-1, FA9327-2, FA9327-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	302	121	61-152
107-02-8	Acrolein	250	267	107	48-178
107-13-1	Acrylonitrile	250	266	106	66-134
71-43-2	Benzene	50	51.8	104	76-126
108-86-1	Bromobenzene	50	53.2	106	76-122
74-97-5	Bromochloromethane	50	52.7	105	77-120
75-27-4	Bromodichloromethane	50	54.3	109	74-130
75-25-2	Bromoform	50	55.1	110	76-127
104-51-8	n-Butylbenzene	50	44.4	89	71-128
135-98-8	sec-Butylbenzene	50	51.2	102	79-135
98-06-6	tert-Butylbenzene	50	49.1	98	77-133
108-90-7	Chlorobenzene	50	56.0	112	81-129
75-00-3	Chloroethane	50	52.0	104	68-133
67-66-3	Chloroform	50	49.7	99	72-123
95-49-8	o-Chlorotoluene	50	55.3	111	77-129
106-43-4	p-Chlorotoluene	50	58.6	117	80-134
110-75-8	2-Chloroethyl vinyl ether	250	226	90	45-159
75-15-0	Carbon disulfide	50	44.4	89	72-122
56-23-5	Carbon tetrachloride	50	56.1	112	78-133
75-34-3	1,1-Dichloroethane	50	50.7	101	73-125
75-35-4	1,1-Dichloroethylene	50	51.9	104	81-136
563-58-6	1,1-Dichloropropene	50	45.8	92	75-130
96-12-8	1,2-Dibromo-3-chloropropane	50	53.3	107	70-137
106-93-4	1,2-Dibromoethane	50	56.0	112	77-126
107-06-2	1,2-Dichloroethane	50	54.4	109	74-128
78-87-5	1,2-Dichloropropane	50	53.0	106	74-125
142-28-9	1,3-Dichloropropane	50	53.8	108	76-122
594-20-7	2,2-Dichloropropane	50	50.7	101	77-133
124-48-1	Dibromochloromethane	50	48.0	96	76-127
75-71-8	Dichlorodifluoromethane	50	46.2	92	68-168
156-59-2	cis-1,2-Dichloroethylene	50	52.6	105	74-126
10061-01-5	cis-1,3-Dichloropropene	50	44.7	89	80-123
541-73-1	m-Dichlorobenzene	50	57.4	115	81-129
95-50-1	o-Dichlorobenzene	50	58.9	118	80-129
106-46-7	p-Dichlorobenzene	50	52.7	105	76-130
156-60-5	trans-1,2-Dichloroethylene	50	49.3	99	70-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3124-BS	H0082966.D	1	10/25/13	EP	n/a	n/a	VH3124

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9327-1, FA9327-2, FA9327-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	48.3	97	75-131
100-41-4	Ethylbenzene	50	54.2	108	77-123
591-78-6	2-Hexanone	250	252	101	72-133
87-68-3	Hexachlorobutadiene	50	50.1	100	74-136
110-54-3	Hexane	50	49.0	98	72-130
98-82-8	Isopropylbenzene	50	51.5	103	80-136
99-87-6	p-Isopropyltoluene	50	47.9	96	77-131
108-10-1	4-Methyl-2-pentanone	250	287	115	76-132
74-83-9	Methyl bromide	50	56.6	113	65-139
74-87-3	Methyl chloride	50	52.3	105	71-144
74-95-3	Methylene bromide	50	53.6	107	74-124
75-09-2	Methylene chloride	50	52.4	105	74-137
78-93-3	Methyl ethyl ketone	250	282	113	75-137
1634-04-4	Methyl Tert Butyl Ether	50	46.7	93	77-120
91-20-3	Naphthalene	50	45.1	90	79-129
103-65-1	n-Propylbenzene	50	58.3	117	80-135
100-42-5	Styrene	50	46.7	93	78-125
630-20-6	1,1,1,2-Tetrachloroethane	50	56.2	112	78-126
71-55-6	1,1,1-Trichloroethane	50	52.4	105	70-129
79-34-5	1,1,2,2-Tetrachloroethane	50	52.1	104	71-126
79-00-5	1,1,2-Trichloroethane	50	54.0	108	74-124
87-61-6	1,2,3-Trichlorobenzene	50	51.7	103	77-128
96-18-4	1,2,3-Trichloropropane	50	52.6	105	74-127
120-82-1	1,2,4-Trichlorobenzene	50	46.2	92	78-130
95-63-6	1,2,4-Trimethylbenzene	50	52.4	105	74-123
108-67-8	1,3,5-Trimethylbenzene	50	51.3	103	73-122
127-18-4	Tetrachloroethylene	50	48.9	98	79-130
108-88-3	Toluene	50	51.4	103	76-124
79-01-6	Trichloroethylene	50	51.6	103	75-128
75-69-4	Trichlorofluoromethane	50	52.9	106	73-145
75-01-4	Vinyl chloride	50	51.0	102	76-141
108-05-4	Vinyl Acetate	250	289	116	48-164
	m,p-Xylene	100	118	118	80-128
95-47-6	o-Xylene	50	52.2	104	80-132

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3124-BS	H0082966.D	1	10/25/13	EP	n/a	n/a	VH3124

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9327-1, FA9327-2, FA9327-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	75-124%
2037-26-5	Toluene-D8	89%	75-126%
460-00-4	4-Bromofluorobenzene	92%	71-133%
17060-07-0	1,2-Dichloroethane-D4	89%	72-135%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9237-11MS	H0082980.D	1	10/25/13	EP	n/a	n/a	VH3124
FA9237-11MSD	H0082981.D	1	10/25/13	EP	n/a	n/a	VH3124
FA9237-11 [a]	H0082979.D	1	10/25/13	EP	n/a	n/a	VH3124

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9327-1, FA9327-2, FA9327-3

CAS No.	Compound	FA9237-11 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		318	309	97	310	101	0	61-152/27
107-02-8	Acrolein	ND		318	232	73	216	71	7	48-178/37
107-13-1	Acrylonitrile	ND		318	294	93	275	90	7	66-134/26
71-43-2	Benzene	ND		63.5	52.8	83	50.7	83	4	76-126/26
108-86-1	Bromobenzene	ND		63.5	56.3	89	54.0	88	4	76-122/32
74-97-5	Bromochloromethane	ND		63.5	56.1	88	53.1	87	5	77-120/24
75-27-4	Bromodichloromethane	ND		63.5	54.3	86	52.7	86	3	74-130/25
75-25-2	Bromoform	ND		63.5	52.8	83	50.2	82	5	76-127/26
104-51-8	n-Butylbenzene	ND		63.5	45.0	71	42.8	70*	5	71-128/35
135-98-8	sec-Butylbenzene	ND		63.5	51.4	81	49.1	80	5	79-135/34
98-06-6	tert-Butylbenzene	ND		63.5	51.1	80	48.9	80	4	77-133/34
108-90-7	Chlorobenzene	ND		63.5	58.4	92	54.7	89	7	81-129/29
75-00-3	Chloroethane	ND		63.5	46.4	73	50.6	83	9	68-133/29
67-66-3	Chloroform	ND		63.5	51.6	81	48.8	80	6	72-123/26
95-49-8	o-Chlorotoluene	ND		63.5	57.9	91	54.6	89	6	77-129/33
106-43-4	p-Chlorotoluene	ND		63.5	61.6	97	58.7	96	5	80-134/33
110-75-8	2-Chloroethyl vinyl ether	ND		318	246	77	233	76	5	45-159/26
75-15-0	Carbon disulfide	ND		63.5	41.9	66*	41.3	67*	1	72-122/29
56-23-5	Carbon tetrachloride	ND		63.5	53.1	84	51.4	84	3	78-133/29
75-34-3	1,1-Dichloroethane	ND		63.5	52.2	82	50.1	82	4	73-125/27
75-35-4	1,1-Dichloroethylene	ND		63.5	48.3	76*	47.3	77*	2	81-136/28
563-58-6	1,1-Dichloropropene	ND		63.5	46.1	73*	43.5	71*	6	75-130/28
96-12-8	1,2-Dibromo-3-chloropropane	ND		63.5	54.3	86	51.9	85	5	70-137/29
106-93-4	1,2-Dibromoethane	ND		63.5	59.4	94	55.7	91	6	77-126/26
107-06-2	1,2-Dichloroethane	ND		63.5	56.1	88	52.8	86	6	74-128/23
78-87-5	1,2-Dichloropropane	ND		63.5	57.2	90	53.8	88	6	74-125/25
142-28-9	1,3-Dichloropropane	ND		63.5	59.0	93	53.8	88	9	76-122/26
594-20-7	2,2-Dichloropropane	ND		63.5	52.9	83	48.6	79	8	77-133/28
124-48-1	Dibromochloromethane	ND		63.5	49.0	77	46.2	75*	6	76-127/27
75-71-8	Dichlorodifluoromethane	ND		63.5	51.6	81	37.9	62*	31*	68-168/29
156-59-2	cis-1,2-Dichloroethylene	ND		63.5	55.2	87	51.8	85	6	74-126/26
10061-01-5	cis-1,3-Dichloropropene	ND		63.5	47.5	75*	44.7	73*	6	80-123/26
541-73-1	m-Dichlorobenzene	ND		63.5	59.2	93	57.2	93	3	81-129/33
95-50-1	o-Dichlorobenzene	ND		63.5	59.5	94	58.4	95	2	80-129/32
106-46-7	p-Dichlorobenzene	ND		63.5	55.9	88	53.4	87	5	76-130/32
156-60-5	trans-1,2-Dichloroethylene	ND		63.5	49.9	79	48.5	79	3	70-127/27

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9237-11MS	H0082980.D	1	10/25/13	EP	n/a	n/a	VH3124
FA9237-11MSD	H0082981.D	1	10/25/13	EP	n/a	n/a	VH3124
FA9237-11 [a]	H0082979.D	1	10/25/13	EP	n/a	n/a	VH3124

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9327-1, FA9327-2, FA9327-3

CAS No.	Compound	FA9237-11 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		63.5	50.7	80	48.3	79	5	75-131/28
100-41-4	Ethylbenzene	ND		63.5	56.5	89	52.6	86	7	77-123/31
591-78-6	2-Hexanone	ND		318	281	89	259	85	8	72-133/26
87-68-3	Hexachlorobutadiene	ND		63.5	45.9	72*	44.4	73*	3	74-136/38
110-54-3	Hexane	ND		63.5	43.9	69*	40.5	66*	8	72-130/32
98-82-8	Isopropylbenzene	ND		63.5	52.3	82	48.8	80	7	80-136/32
99-87-6	p-Isopropyltoluene	ND		63.5	62.5	98	54.0	88	15	77-131/34
108-10-1	4-Methyl-2-pentanone	ND		318	324	102	295	96	9	76-132/26
74-83-9	Methyl bromide	ND		63.5	51.5	81	55.7	91	8	65-139/31
74-87-3	Methyl chloride	ND		63.5	48.0	76	48.2	79	0	71-144/27
74-95-3	Methylene bromide	ND		63.5	55.7	88	52.2	85	6	74-124/24
75-09-2	Methylene chloride	ND		63.5	56.8	89	55.8	91	2	74-137/28
78-93-3	Methyl ethyl ketone	ND		318	317	100	286	93	10	75-137/25
1634-04-4	Methyl Tert Butyl Ether	ND		63.5	55.4	87	53.6	88	3	77-120/24
91-20-3	Naphthalene	ND		63.5	48.6	77*	46.0	75*	5	79-129/33
103-65-1	n-Propylbenzene	ND		63.5	60.4	95	57.2	93	5	80-135/33
100-42-5	Styrene	ND		63.5	48.9	77*	46.1	75*	6	78-125/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		63.5	57.5	91	55.0	90	4	78-126/27
71-55-6	1,1,1-Trichloroethane	ND		63.5	52.7	83	49.4	81	6	70-129/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		63.5	57.2	90	53.9	88	6	71-126/30
79-00-5	1,1,2-Trichloroethane	ND		63.5	58.6	92	53.0	87	10	74-124/28
87-61-6	1,2,3-Trichlorobenzene	ND		63.5	53.8	85	51.8	85	4	77-128/35
96-18-4	1,2,3-Trichloropropane	ND		63.5	58.6	92	55.0	90	6	74-127/27
120-82-1	1,2,4-Trichlorobenzene	ND		63.5	49.3	78	47.7	78	3	78-130/34
95-63-6	1,2,4-Trimethylbenzene	ND		63.5	56.6	89	53.3	87	6	74-123/34
108-67-8	1,3,5-Trimethylbenzene	ND		63.5	54.9	86	53.2	87	3	73-122/33
127-18-4	Tetrachloroethylene	ND		63.5	50.8	80	47.8	78*	6	79-130/31
108-88-3	Toluene	ND		63.5	54.8	86	50.3	82	9	76-124/30
79-01-6	Trichloroethylene	ND		63.5	52.8	83	50.3	82	5	75-128/27
75-69-4	Trichlorofluoromethane	ND		63.5	44.5	70*	46.6	76	5	73-145/31
75-01-4	Vinyl chloride	ND		63.5	44.7	70*	45.8	75*	2	76-141/27
108-05-4	Vinyl Acetate	ND		318	284	89	262	86	8	48-164/37
	m,p-Xylene	ND		127	124	98	114	93	8	80-128/30
95-47-6	o-Xylene	ND		63.5	54.1	85	50.5	83	7	80-132/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9237-11MS	H0082980.D	1	10/25/13	EP	n/a	n/a	VH3124
FA9237-11MSD	H0082981.D	1	10/25/13	EP	n/a	n/a	VH3124
FA9237-11 [a]	H0082979.D	1	10/25/13	EP	n/a	n/a	VH3124

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9327-1, FA9327-2, FA9327-3

CAS No.	Surrogate Recoveries	MS	MSD	FA9237-11	Limits
1868-53-7	Dibromofluoromethane	86%	87%	78%	75-124%
2037-26-5	Toluene-D8	91%	89%	88%	75-126%
460-00-4	4-Bromofluorobenzene	93%	92%	86%	71-133%
17060-07-0	1,2-Dichloroethane-D4	85%	87%	86%	72-135%

(a) Sample was received in a bulk container but was not preserved within 48 hours of sampling.

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MB	U041766.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9327-1, FA9327-2

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	830	170	ug/kg	
95-57-8	2-Chlorophenol	ND	170	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	18	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	19	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	24	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	21	ug/kg	
	3&4-Methylphenol	ND	170	35	ug/kg	
88-75-5	2-Nitrophenol	ND	170	25	ug/kg	
100-02-7	4-Nitrophenol	ND	830	130	ug/kg	
87-86-5	Pentachlorophenol	ND	830	130	ug/kg	
108-95-2	Phenol	ND	170	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	20	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	21	ug/kg	
83-32-9	Acenaphthene	ND	170	20	ug/kg	
208-96-8	Acenaphthylene	ND	170	19	ug/kg	
62-53-3	Aniline	ND	170	53	ug/kg	
120-12-7	Anthracene	ND	170	17	ug/kg	
92-87-5	Benzidine	ND	1700	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	21	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	22	ug/kg	
106-47-8	4-Chloroaniline	ND	170	25	ug/kg	
86-74-8	Carbazole	ND	170	18	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	23	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	17	ug/kg	

Method Blank Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MB	U041766.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9327-1, FA9327-2

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	170	17	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	18	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	17	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	17	ug/kg	
132-64-9	Dibenzofuran	ND	170	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate	ND	330	33	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	33	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	33	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	23	ug/kg	
67-72-1	Hexachloroethane	ND	170	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	17	ug/kg	
78-59-1	Isophorone	ND	170	18	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	23	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	25	ug/kg	
99-09-2	3-Nitroaniline	ND	170	23	ug/kg	
100-01-6	4-Nitroaniline	ND	170	36	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
98-95-3	Nitrobenzene	ND	170	24	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	24	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	17	ug/kg	
110-86-1	Pyridine	ND	330	38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	18	ug/kg	

Method Blank Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MB	U041766.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9327-1, FA9327-2

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	82%	40-102%
4165-62-2	Phenol-d5	83%	41-100%
118-79-6	2,4,6-Tribromophenol	94%	42-108%
4165-60-0	Nitrobenzene-d5	76%	40-105%
321-60-8	2-Fluorobiphenyl	84%	43-107%
1718-51-0	Terphenyl-d14	112%	45-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
4161-60-8	2-Pentanone, 4-hydroxy-	2.54	220	ug/kg	JN
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.78	6500	ug/kg	JN
	Total TIC, Semi-Volatile		6720	ug/kg	J

Blank Spike Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-BS	U041765.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9327-1, FA9327-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic Acid	3330	2430	73	36-118
95-57-8	2-Chlorophenol	1670	1160	70	48-104
59-50-7	4-Chloro-3-methyl phenol	1670	1230	74	52-108
120-83-2	2,4-Dichlorophenol	1670	1290	77	51-105
105-67-9	2,4-Dimethylphenol	1670	1220	73	43-96
51-28-5	2,4-Dinitrophenol	3330	2400	72	40-119
534-52-1	4,6-Dinitro-o-cresol	3330	2710	81	64-121
95-48-7	2-Methylphenol	1670	1170	70	46-107
	3&4-Methylphenol	3330	2580	77	44-111
88-75-5	2-Nitrophenol	1670	1260	76	49-104
100-02-7	4-Nitrophenol	3330	2410	72	56-116
87-86-5	Pentachlorophenol	3330	3200	96	61-114
108-95-2	Phenol	1670	1200	72	45-110
95-95-4	2,4,5-Trichlorophenol	1670	1420	85	58-112
88-06-2	2,4,6-Trichlorophenol	1670	1420	85	56-109
83-32-9	Acenaphthene	1670	1380	83	56-109
208-96-8	Acenaphthylene	1670	1410	85	56-106
62-53-3	Aniline	1670	1200	72	42-108
120-12-7	Anthracene	1670	1440	86	61-110
92-87-5	Benzidine	1670	889	53	10-109
56-55-3	Benzo(a)anthracene	1670	1430	86	66-111
50-32-8	Benzo(a)pyrene	1670	1420	85	59-104
205-99-2	Benzo(b)fluoranthene	1670	1440	86	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1410	85	67-113
207-08-9	Benzo(k)fluoranthene	1670	1580	95	67-114
101-55-3	4-Bromophenyl phenyl ether	1670	1250	75	62-110
85-68-7	Butyl benzyl phthalate	1670	1430	86	65-113
100-51-6	Benzyl Alcohol	1670	1470	88	53-108
91-58-7	2-Chloronaphthalene	1670	1310	79	53-106
106-47-8	4-Chloroaniline	1670	1190	71	30-115
86-74-8	Carbazole	1670	1360	82	60-111
218-01-9	Chrysene	1670	1520	91	65-112
111-91-1	bis(2-Chloroethoxy)methane	1670	1240	74	48-105
111-44-4	bis(2-Chloroethyl)ether	1670	1160	70	46-103
108-60-1	bis(2-Chloroisopropyl)ether	1670	1150	69	40-110
7005-72-3	4-Chlorophenyl phenyl ether	1670	1320	79	58-106

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-BS	U041765.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9327-1, FA9327-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	1670	1130	68	44-102
122-66-7	1,2-Diphenylhydrazine	1670	1340	80	58-112
541-73-1	1,3-Dichlorobenzene	1670	1120	67	42-100
106-46-7	1,4-Dichlorobenzene	1670	1170	70	40-106
121-14-2	2,4-Dinitrotoluene	1670	1310	79	59-109
606-20-2	2,6-Dinitrotoluene	1670	1310	79	61-107
91-94-1	3,3'-Dichlorobenzidine	1670	1350	81	36-114
53-70-3	Dibenzo(a,h)anthracene	1670	1440	86	68-115
132-64-9	Dibenzofuran	1670	1410	85	57-108
84-74-2	Di-n-butyl phthalate	1670	1300	78	63-108
117-84-0	Di-n-octyl phthalate	1670	1460	88	64-119
84-66-2	Diethyl phthalate	1670	1300	78	61-109
131-11-3	Dimethyl phthalate	1670	1300	78	59-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1450	87	64-115
206-44-0	Fluoranthene	1670	1340	80	60-108
86-73-7	Fluorene	1670	1400	84	58-109
118-74-1	Hexachlorobenzene	1670	1480	89	59-111
87-68-3	Hexachlorobutadiene	1670	1310	79	41-108
77-47-4	Hexachlorocyclopentadiene	1670	1230	74	49-110
67-72-1	Hexachloroethane	1670	1150	69	40-105
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1340	80	66-116
78-59-1	Isophorone	1670	1190	71	42-89
90-12-0	1-Methylnaphthalene	1670	1270	76	49-106
91-57-6	2-Methylnaphthalene	1670	1260	76	47-106
88-74-4	2-Nitroaniline	1670	1320	79	56-123
99-09-2	3-Nitroaniline	1670	1120	67	41-111
100-01-6	4-Nitroaniline	1670	1280	77	54-113
91-20-3	Naphthalene	1670	1290	77	44-104
98-95-3	Nitrobenzene	1670	1160	70	43-108
62-75-9	N-Nitrosodimethylamine	1670	1040	62	40-106
621-64-7	N-Nitroso-di-n-propylamine	1670	1210	73	48-108
86-30-6	N-Nitrosodiphenylamine	1670	1420	85	62-110
85-01-8	Phenanthrene	1670	1440	86	63-111
129-00-0	Pyrene	1670	1520	91	65-115
110-86-1	Pyridine	1670	1070	64	31-102
120-82-1	1,2,4-Trichlorobenzene	1670	1200	72	45-100

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-BS	U041765.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9327-1, FA9327-2

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	74%	40-102%
4165-62-2	Phenol-d5	75%	41-100%
118-79-6	2,4,6-Tribromophenol	92%	42-108%
4165-60-0	Nitrobenzene-d5	72%	40-105%
321-60-8	2-Fluorobiphenyl	79%	43-107%
1718-51-0	Terphenyl-d14	96%	45-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MS	L066559.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
OP49247-MSD	L066560.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
FA9292-1R	L066558.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9327-1, FA9327-2

7.3.1

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CAS No.	Compound	FA9292-1R ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		3800	2640	69	2420	63	9	36-118/41
95-57-8	2-Chlorophenol	ND		1900	1180	62	1080	56	9	48-104/26
59-50-7	4-Chloro-3-methyl phenol	ND		1900	1230	65	1090	57	12	52-108/21
120-83-2	2,4-Dichlorophenol	ND		1900	1200	63	1120	58	7	51-105/27
105-67-9	2,4-Dimethylphenol	ND		1900	1170	62	1080	56	8	43-96/23
51-28-5	2,4-Dinitrophenol	ND		3800	2580	68	2060	54	22	40-119/32
534-52-1	4,6-Dinitro-o-cresol	ND		3800	2810	74	2330	61*	19	64-121/29
95-48-7	2-Methylphenol	ND		1900	1280	67	1160	60	10	46-107/24
	3&4-Methylphenol	ND		3800	2580	68	2330	61	10	44-111/24
88-75-5	2-Nitrophenol	ND		1900	1230	65	1180	61	4	49-104/27
100-02-7	4-Nitrophenol	ND		3800	2980	78	2410	63	21	56-116/23
87-86-5	Pentachlorophenol	ND		3800	3040	80	2720	71	11	61-114/23
108-95-2	Phenol	ND		1900	1270	67	1160	60	9	45-110/24
95-95-4	2,4,5-Trichlorophenol	ND		1900	1540	81	1420	74	8	58-112/22
88-06-2	2,4,6-Trichlorophenol	ND		1900	1500	79	1390	72	8	56-109/25
83-32-9	Acenaphthene	ND		1900	1460	77	1420	74	3	56-109/23
208-96-8	Acenaphthylene	ND		1900	1520	80	1520	79	0	56-106/23
62-53-3	Aniline	ND		1900	1160	61	869	45	29*	42-108/28
120-12-7	Anthracene	ND		1900	1590	84	1880	98	17	61-110/21
92-87-5	Benzidine	ND		1900	ND	0*	ND	0*	nc	10-109/35
56-55-3	Benzo(a)anthracene	86.0	J	1900	1660	83	3120	158*	61*	66-111/23
50-32-8	Benzo(a)pyrene	97.0	J	1900	1590	79	2930	147*	59*	59-104/23
205-99-2	Benzo(b)fluoranthene	94.4	J	1900	1610	80	2830	142*	55*	67-113/24
191-24-2	Benzo(g,h,i)perylene	75.2	J	1900	1800	91	2800	142*	43*	67-113/21
207-08-9	Benzo(k)fluoranthene	99.3	J	1900	1570	77	2270	113	36*	67-114/22
101-55-3	4-Bromophenyl phenyl ether	ND		1900	1360	72	1270	66	7	62-110/21
85-68-7	Butyl benzyl phthalate	ND		1900	1640	86	1390	72	17	65-113/20
100-51-6	Benzyl Alcohol	ND		1900	1310	69	1140	59	14	53-108/24
91-58-7	2-Chloronaphthalene	ND		1900	1410	74	1340	70	5	53-106/23
106-47-8	4-Chloroaniline	ND		1900	978	51	789	41	21	30-115/30
86-74-8	Carbazole	ND		1900	1480	78	1320	69	11	60-111/19
218-01-9	Chrysene	132	J	1900	1770	86	3640	183*	69*	65-112/25
111-91-1	bis(2-Chloroethoxy)methane	ND		1900	1220	64	1150	60	6	48-105/24
111-44-4	bis(2-Chloroethyl)ether	ND		1900	1220	64	1140	59	7	46-103/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		1900	1300	68	1230	64	6	40-110/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		1900	1420	75	1270	66	11	58-106/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MS	L066559.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
OP49247-MSD	L066560.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
FA9292-1R	L066558.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9327-1, FA9327-2

CAS No.	Compound	FA9292-1R ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		1900	1160	61	1080	56	7	44-102/28
122-66-7	1,2-Diphenylhydrazine	ND		1900	1600	84	1510	79	6	58-112/22
541-73-1	1,3-Dichlorobenzene	ND		1900	1140	60	1070	56	6	42-100/30
106-46-7	1,4-Dichlorobenzene	ND		1900	1210	64	1140	59	6	40-106/29
121-14-2	2,4-Dinitrotoluene	ND		1900	1640	86	1350	70	19	59-109/20
606-20-2	2,6-Dinitrotoluene	ND		1900	1610	85	1450	75	10	61-107/22
91-94-1	3,3'-Dichlorobenzidine	ND		1900	1190	63	749	39	45*	36-114/28
53-70-3	Dibenzo(a,h)anthracene	ND		1900	1800	95	2100	109	15	68-115/23
132-64-9	Dibenzofuran	ND		1900	1540	81	1370	71	12	57-108/22
84-74-2	Di-n-butyl phthalate	ND		1900	1530	80	1350	70	13	63-108/19
117-84-0	Di-n-octyl phthalate	ND		1900	1610	85	1280	67	23*	64-119/21
84-66-2	Diethyl phthalate	136	J	1900	1450	69	1270	59*	13	61-109/20
131-11-3	Dimethyl phthalate	ND		1900	1470	77	1330	69	10	59-108/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		1900	1670	88	1440	75	15	64-115/23
206-44-0	Fluoranthene	220		1900	1660	76	3980	196*	82*	60-108/25
86-73-7	Fluorene	ND		1900	1490	78	1470	77	1	58-109/21
118-74-1	Hexachlorobenzene	ND		1900	1550	82	1360	71	13	59-111/21
87-68-3	Hexachlorobutadiene	ND		1900	1230	65	1250	65	2	41-108/27
77-47-4	Hexachlorocyclopentadiene	ND		1900	1120	59	986	51	13	49-110/31
67-72-1	Hexachloroethane	ND		1900	1190	63	1110	58	7	40-105/32
193-39-5	Indeno(1,2,3-cd)pyrene	78.2	J	1900	1710	86	2740	139*	46*	66-116/22
78-59-1	Isophorone	ND		1900	1170	62	1080	56	8	42-89/22
90-12-0	1-Methylnaphthalene	ND		1900	1190	63	1140	59	4	49-106/26
91-57-6	2-Methylnaphthalene	ND		1900	1270	67	1150	60	10	47-106/27
88-74-4	2-Nitroaniline	ND		1900	1680	88	1520	79	10	56-123/24
99-09-2	3-Nitroaniline	ND		1900	1300	68	1100	57	17	41-111/25
100-01-6	4-Nitroaniline	ND		1900	1340	70	1070	56	22	54-113/22
91-20-3	Naphthalene	ND		1900	1230	65	1190	62	3	44-104/27
98-95-3	Nitrobenzene	ND		1900	1190	63	1140	59	4	43-108/25
62-75-9	N-Nitrosodimethylamine	ND		1900	1370	72	1260	66	8	40-106/27
621-64-7	N-Nitroso-di-n-propylamine	ND		1900	1280	67	1170	61	9	48-108/27
86-30-6	N-Nitrosodiphenylamine	ND		1900	1610	85	1560	81	3	62-110/21
85-01-8	Phenanthrene	152	J	1900	1740	84	3320	165*	62*	63-111/22
129-00-0	Pyrene	248		1900	1930	88	5750	286*	99*	65-115/25
110-86-1	Pyridine	ND		1900	991	52	831	43	18	31-102/38
120-82-1	1,2,4-Trichlorobenzene	ND		1900	1140	60	1120	58	2	45-100/26

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MS	L066559.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
OP49247-MSD	L066560.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
FA9292-1R	L066558.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9327-1, FA9327-2

CAS No.	Surrogate Recoveries	MS	MSD	FA9292-1R	Limits
367-12-4	2-Fluorophenol	70%	62%	69%	40-102%
4165-62-2	Phenol-d5	72%	64%	70%	41-100%
118-79-6	2,4,6-Tribromophenol	84%	74%	79%	42-108%
4165-60-0	Nitrobenzene-d5	67%	62%	72%	40-105%
321-60-8	2-Fluorobiphenyl	80%	72%	74%	43-107%
1718-51-0	Terphenyl-d14	95%	78%	90%	45-119%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR3391-MB	QR079607.D	1	10/28/13	MM	n/a	n/a	GQR3391

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9327-1, FA9327-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	110%	56-149%
98-08-8	aaa-Trifluorotoluene	107%	66-132%

Blank Spike Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR3391-BS	QR079606.D	1	10/28/13	MM	n/a	n/a	GQR3391

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9327-1, FA9327-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	19.4	97	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	107%	56-149%
98-08-8	aaa-Trifluorotoluene	100%	66-132%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9327-2MS	QR079610.D	1	10/28/13	MM	n/a	n/a	GQR3391
FA9327-2MSD	QR079611.D	1	10/28/13	MM	n/a	n/a	GQR3391
FA9327-2	QR079609.D	1	10/28/13	MM	n/a	n/a	GQR3391

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9327-1, FA9327-2

CAS No.	Compound	FA9327-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		23.2	26.6	114	24.9	107	7	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA9327-2	Limits
460-00-4	4-Bromofluorobenzene	127%	126%	134%	56-149%
98-08-8	aaa-Trifluorotoluene	102%	106%	123%	66-132%

8.3.1

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* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49288-MB	YY38955.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9327-1, FA9327-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	8.3	3.3	mg/kg	
	TPH (> C22-C36)	ND	8.3	3.3	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	102%	56-122%

Blank Spike Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49288-BS	YY38954.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9327-1, FA9327-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C22)	33.3	31.2	94	65-116
	TPH (> C22-C36)	33.3	29.5	89	51-148

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	121%	56-122%

9.2.1

9

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9327
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49288-MS	YY38978.D	5	11/06/13	SJL	11/04/13	OP49288	GYY1433
OP49288-MSD	YY38979.D	5	11/06/13	SJL	11/04/13	OP49288	GYY1433
FA9516-8	YY38977.D	5	11/06/13	SJL	11/04/13	OP49288	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9327-1, FA9327-2

CAS No.	Compound	FA9516-8 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	148		35.7	155	20* [a]	193	123* [a]	22	65-116/28
	TPH (> C22-C36)	144		35.7	150	17* [a]	197	145	27	51-148/28

CAS No.	Surrogate Recoveries	MS	MSD	FA9516-8	Limits
84-15-1	o-Terphenyl	93%	74%	109%	56-122%

(a) Outside control limits due to high level in sample relative to spike amount.

9.3.1

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

11/11/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA9328

Sampling Date: 10/22/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **109**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

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Accutest LabLink@146533 10:08 11-Nov-2013

Sample Summary

Bhate Environmental

Job No: FA9328

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA9328-1	10/22/13	09:00	DMZB	10/23/13	AQ	Ground Water	SS61-MW29
FA9328-1F	10/22/13	09:00	DMZB	10/23/13	AQ	Groundwater Filtered	SS61-MW29
FA9328-2	10/22/13	00:00	DMZB	10/23/13	AQ	Trip Blank Water	TRIP BLANK
FA9328-3	10/22/13	10:50	DMZB	10/23/13	AQ	Ground Water	SS61-MW28
FA9328-3F	10/22/13	10:50	DMZB	10/23/13	AQ	Groundwater Filtered	SS61-MW28
FA9328-4	10/22/13	00:00	DMZB	10/23/13	AQ	Trip Blank Water	TRIP BLANK
FA9328-5	10/22/13	12:45	DMZB	10/23/13	AQ	Ground Water	SS61-MW27
FA9328-5F	10/22/13	12:45	DMZB	10/23/13	AQ	Groundwater Filtered	SS61-MW27
FA9328-6	10/22/13	00:00	DMZB	10/23/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA9328

Site: Holloman AFB; SS61 VCM **Report Date** 11/8/2013 1:59:55 PM

3 Samples and 3 Trip Blanks were collected on 10/22/2013 and were received at Accutest SE on 10/23/2013 properly preserved, at 2 Deg. C and intact. These Samples received an Accutest job number of FA9328. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VO792

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9297-8MS, FA9297-8MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, Carbon disulfide, Dichlorodifluoromethane are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, Carbon disulfide are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

FA9328-6: Sample vial(s) contained significant headspace; reported results are considered minimum values.

Matrix: AQ **Batch ID:** VP768

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9480-11MS, FA9480-11MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acetone, Dichlorodifluoromethane are outside control limits. Blank Spike recoveries are biased high. Analytes are non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, Carbon disulfide, Dichlorodifluoromethane are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,2,3-Trichloropropane, 2-Chloroethyl vinyl ether, Carbon disulfide are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for 2-Chloroethyl vinyl ether are outside control limits for sample FA9480-11MSD. Probable cause is due to sample non-homogeneity.

FA9328-1 for Acetone: Associated BS recovery outside control limits.

FA9328-1 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

FA9328-2 for Acetone: Associated BS recovery outside control limits.

FA9328-2 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

FA9328-3 for Acetone: Associated BS recovery outside control limits.

FA9328-3 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

FA9328-4 for Acetone: Associated BS recovery outside control limits.

FA9328-4 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VP769

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-5MS, FA9375-5MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP49203

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JB51048-3MS, JB51048-3MSD were used as the QC samples indicated.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for Benzidine are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Benzidine are outside control limits for sample OP49203-MSD. Probable cause is due to sample non-homogeneity.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD5084

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-1MS, FA9288-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP49193

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-1MS, FA9288-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for TPH (>C22-C36), TPH (C10-C22) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for TPH (C10-C22) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for TPH (C10-C22) are outside control limits for sample OP49193-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) OP49193-MS has surrogates outside control limits. Probable cause is due to matrix interference.

OP49193-MS for o-Terphenyl: Outside control limits.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP26272

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9328-1DUP, FA9328-1MS, FA9328-1MSD, FA9328-1PS, FA9328-1SDL were used as the QC samples for metals.

RPD(s) for Duplicate for Iron are outside control limits for sample MP26272-D1. RPD acceptable due to low duplicate and sample concentrations.

MP26272-PS1 for Manganese: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP22744

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9312-1MS, FA9312-1MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA9328-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP22745

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9329-2MS, FA9329-2MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA9328-3 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA9328-5 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP22816

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9328-1MS, FA9328-1MSD were used as the QC samples for Nitrogen, Ammonia.

Matrix: AQ **Batch ID:** GP22829

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-1MS, FA9375-1MSD were used as the QC samples for Nitrogen, Ammonia.

Matrix Spike Recovery(s) for Nitrogen, Ammonia are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP22755

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-3MS, FA9288-3MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Matrix Spike Recovery(s) for Nitrogen, Total Kjeldahl are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN58413

All method blanks for this batch meet method specific criteria.

Sample(s) FA9328-1DUP was used as the QC samples for Iron, Ferrous.

FA9328-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA9328-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA9328-5 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R32336

FA9328-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R32337

FA9328-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R32338

FA9328-5 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN58444

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9321-6DUP was used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP22741

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9328-5DUP was used as the QC samples for BOD, 5 Day.

Blank Spike Recovery(s) for BOD, 5 Day are outside control limits.

RPD(s) for Duplicate for BOD, 5 Day are outside control limits for sample GP22741-D2. RPD acceptable due to low duplicate and sample concentrations.

FA9328-1 for BOD, 5 Day: Estimated value. Result considered minimum due to low spike recovery.

FA9328-3 for BOD, 5 Day: Estimated value. Result considered minimum due to low spike recovery.

FA9328-5 for BOD, 5 Day: Estimated value. Result considered minimum due to low spike recovery.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP22766

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9369-1MS, FA9369-1MSD were used as the QC samples for Chemical Oxygen Demand.

Matrix Spike Recovery(s) for Chemical Oxygen Demand are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Date: November 8, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA9328
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/22/13

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Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA9328-1	**SS61-MW29**					
tert-Butylbenzene		1.6	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		0.96 J	1.0	0.22	ug/l	SW846 8260B
Isopropylbenzene		0.53 J	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.0842 J	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		0.190 J	0.23	0.093	mg/l	SW846 8015C
TPH (> C22-C36)		0.105 J	0.23	0.093	mg/l	SW846 8015C
Manganese		658	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		37.0	20	5.3	mg/l	SM19 5220C
Iron, Ferrous [a]		0.053 J	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.044 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		1.5	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		13600	1000	100	mg/l	SM19 2540C
Sulfate		5460	200	60	mg/l	EPA 300/SW846 9056A
FA9328-1F	**SS61-MW29**					
Manganese		613	15	0.70	ug/l	EPA 200.7
FA9328-2	**TRIP BLANK**					
No hits reported in this sample.						
FA9328-3	**SS61-MW28**					
sec-Butylbenzene		3.1	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		12.7	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		1.2	1.0	0.22	ug/l	SW846 8260B
Ethylbenzene		0.79 J	1.0	0.29	ug/l	SW846 8260B
Isopropylbenzene		114	2.0	0.40	ug/l	SW846 8260B
n-Propylbenzene		2.3	1.0	0.23	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.688	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		3.33	1.2	0.46	mg/l	SW846 8015C
Iron		1100	300	29	ug/l	EPA 200.7
Manganese		991	15	0.70	ug/l	EPA 200.7
BOD, 5 Day [b]		6.3	4.0	4.0	mg/l	SM19 5210B
Chemical Oxygen Demand		56.8	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide		1.1	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [c]		0.17 J	0.50	0.091	mg/l	SM18 3500FED M
Iron, Ferrous [a]		0.93	0.20	0.062	mg/l	SM18 3500FED
Nitrogen, Ammonia		0.036 J	0.10	0.030	mg/l	EPA 350.1
Nitrogen, Total Kjeldahl		1.3	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		11100	1000	100	mg/l	SM19 2540C
Sulfate		4580	200	60	mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: FA9328
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/22/13

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA9328-3F	**SS61-MW28**					
Manganese		965	15	0.70	ug/l	EPA 200.7
FA9328-4	**TRIP BLANK**					
Toluene		0.27 J	1.0	0.20	ug/l	SW846 8260B
FA9328-5	**SS61-MW27**					
tert-Butylbenzene		14.0	1.0	0.29	ug/l	SW846 8260B
m-Dichlorobenzene		0.33 J	1.0	0.25	ug/l	SW846 8260B
o-Dichlorobenzene		0.72 J	1.0	0.22	ug/l	SW846 8260B
p-Dichlorobenzene		0.30 J	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene		4.5	1.0	0.20	ug/l	SW846 8260B
Fluoranthene		0.55 J	4.7	0.55	ug/l	SW846 8270D
TPH-GRO (C6-C10)		0.676	0.20	0.10	mg/l	SW846 8015C
TPH (C10-C22)		0.188 J	0.23	0.093	mg/l	SW846 8015C
Iron		4740	300	29	ug/l	EPA 200.7
Manganese		2530	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		7.4 J	20	5.3	mg/l	SM19 5220C
Iron, Ferric [c]		0.94	0.80	0.18	mg/l	SM18 3500FED M
Iron, Ferrous [a]		3.8	0.50	0.16	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		1.0	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5840	500	50	mg/l	SM19 2540C
Sulfate		3020	100	30	mg/l	EPA 300/SW846 9056A
FA9328-5F	**SS61-MW27**					
Manganese		2570	15	0.70	ug/l	EPA 200.7
FA9328-6	**TRIP BLANK**					
Toluene [d]		0.20 J	1.0	0.20	ug/l	SW846 8260B

(a) Field analysis required. Received out of hold time and analyzed by request.
(b) Estimated value. Result considered minimum due to low spike recovery.
(c) Calculated as: (Iron) - (Iron, Ferrous)
(d) Sample vial(s) contained significant headspace; reported results are considered minimum values.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P20321.D	1	11/04/13	EG	n/a	n/a	VP768
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	1.6	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.96	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	0.53	1.0	0.20	ug/l	J
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	110%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X031384.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.3	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.66	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.7	0.66	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.3	1.3	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.67	ug/l	
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.63	ug/l	
100-02-7	4-Nitrophenol	ND	23	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	23	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.51	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.84	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.65	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.70	ug/l	
92-87-5	Benzidine	ND	23	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.53	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.62	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.62	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.93	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.68	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.64	ug/l	
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.67	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.64	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.60	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.72	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.65	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.64	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.75	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.54	ug/l	
132-64-9	Dibenzofuran	ND	4.7	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.7	0.93	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.7	0.93	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.93	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.75	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.55	ug/l	
86-73-7	Fluorene	ND	4.7	0.71	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.64	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.89	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.74	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.69	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	0.66	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.90	ug/l	
91-20-3	Naphthalene	ND	4.7	0.59	ug/l	
98-95-3	Nitrobenzene	ND	4.7	0.67	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.79	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.93	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.66	ug/l	
129-00-0	Pyrene	ND	4.7	0.63	ug/l	
110-86-1	Pyridine	ND	9.3	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	35%		14-67%
4165-62-2	Phenol-d5	31%		10-50%
118-79-6	2,4,6-Tribromophenol	92%		33-118%
4165-60-0	Nitrobenzene-d5	71%		42-108%
321-60-8	2-Fluorobiphenyl	75%		40-106%
1718-51-0	Terphenyl-d14	92%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124554.D	1	10/25/13	CP	n/a	n/a	GCD5084
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.0842	0.10	0.050	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		70-131%
98-08-8	aaa-Trifluorotoluene	100%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38919.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
Run #2							

	Initial Volume	Final Volume
Run #1	1080 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.190	0.23	0.093	mg/l	J
	TPH (> C22-C36)	0.105	0.23	0.093	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	55%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	29 U	300	29	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]
Manganese	658	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	4.0 U	4.0	4.0	mg/l	2	10/28/13 12:04	MG	SM19 5210B
Chemical Oxygen Demand	37.0	20	5.3	mg/l	1	10/25/13 09:50	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	10/24/13 14:00	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.059 U	0.40	0.059	mg/l	1	11/07/13 20:00	LM	SM18 3500FED M
Iron, Ferrous [c]	0.053 J	0.10	0.030	mg/l	1	10/23/13 11:50	AC	SM18 3500FED
Nitrogen, Ammonia	0.044 J	0.10	0.030	mg/l	1	11/01/13 11:09	VK	EPA 350.1
Nitrogen, Nitrate [d]	5.0 U	10	5.0	mg/l	100	10/23/13 16:47	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.5	0.53	0.17	mg/l	1	10/28/13 11:03	MG	EPA 351.2
Solids, Total Dissolved	13600	1000	100	mg/l	10	10/24/13 13:05	KC	SM19 2540C
Sulfate	5460	200	60	mg/l	100	10/23/13 16:47	AA	EPA 300/SW846 9056A

(a) Estimated value. Result considered minimum due to low spike recovery.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW29		
Lab Sample ID:	FA9328-1F	**Date Sampled:**	10/22/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/23/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	613	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9328-2	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P20305.D	1	11/04/13	EG	n/a	n/a	VP768
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9328-2	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9328-2	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P20322.D	1	11/04/13	EG	n/a	n/a	VP768
Run #2	P20343.D	2	11/05/13	EG	n/a	n/a	VP769

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	3.1	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	12.7	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	1.2	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	0.79	1.0	0.29	ug/l	J
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	114 [b]	2.0	0.40	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	2.3	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	105%	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	108%	79-125%
2037-26-5	Toluene-D8	99%	96%	85-112%
460-00-4	4-Bromofluorobenzene	107%	101%	83-118%

(a) Associated BS recovery outside control limits.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X031385.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.3	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.66	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.7	0.66	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.3	1.3	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.67	ug/l	
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.63	ug/l	
100-02-7	4-Nitrophenol	ND	23	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	23	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.51	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.84	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.65	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.70	ug/l	
92-87-5	Benzidine	ND	23	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.53	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.62	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.62	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.93	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.68	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.64	ug/l	
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.67	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.64	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.60	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.72	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.65	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.64	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.75	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.54	ug/l	
132-64-9	Dibenzofuran	ND	4.7	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.7	0.93	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.7	0.93	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.93	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.75	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.55	ug/l	
86-73-7	Fluorene	ND	4.7	0.71	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.64	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.89	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.74	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.69	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	0.66	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.90	ug/l	
91-20-3	Naphthalene	ND	4.7	0.59	ug/l	
98-95-3	Nitrobenzene	ND	4.7	0.67	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.79	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.93	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.66	ug/l	
129-00-0	Pyrene	ND	4.7	0.63	ug/l	
110-86-1	Pyridine	ND	9.3	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		14-67%
4165-62-2	Phenol-d5	31%		10-50%
118-79-6	2,4,6-Tribromophenol	94%		33-118%
4165-60-0	Nitrobenzene-d5	72%		42-108%
321-60-8	2-Fluorobiphenyl	74%		40-106%
1718-51-0	Terphenyl-d14	85%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124555.D	1	10/25/13	CP	n/a	n/a	GCD5084
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.688	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	119%		70-131%
98-08-8	aaa-Trifluorotoluene	118%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38920.D	5	10/31/13	SJL	10/28/13	OP49193	GYY1431
Run #2							

	Initial Volume	Final Volume
Run #1	1080 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.33	1.2	0.46	mg/l	
	TPH (> C22-C36)	ND	1.2	0.46	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	1100	300	29	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]
Manganese	991	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	6.3	4.0	4.0	mg/l	2	10/28/13 12:04	MG	SM19 5210B
Chemical Oxygen Demand	56.8	20	5.3	mg/l	1	10/25/13 09:50	LE	SM19 5220C
Hydrogen Sulfide	1.1	1.0	0.50	mg/l	1	10/24/13 14:00	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.17 J	0.50	0.091	mg/l	1	11/07/13 20:29	LM	SM18 3500FED M
Iron, Ferrous [c]	0.93	0.20	0.062	mg/l	2	10/23/13 11:50	AC	SM18 3500FED
Nitrogen, Ammonia	0.036 J	0.10	0.030	mg/l	1	11/04/13 12:21	VK	EPA 350.1
Nitrogen, Nitrate [d]	5.0 U	10	5.0	mg/l	100	10/23/13 19:10	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.3	0.53	0.17	mg/l	1	10/28/13 11:04	MG	EPA 351.2
Solids, Total Dissolved	11100	1000	100	mg/l	10	10/24/13 13:05	KC	SM19 2540C
Sulfate	4580	200	60	mg/l	100	10/23/13 19:10	AA	EPA 300/SW846 9056A

(a) Estimated value. Result considered minimum due to low spike recovery.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW28		
Lab Sample ID:	FA9328-3F	**Date Sampled:**	10/22/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/23/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	965	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9328-4	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P20304.D	1	11/04/13	EG	n/a	n/a	VP768
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9328-4	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.27	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9328-4	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O19915.D	1	11/01/13	MM	n/a	n/a	VO792
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	14.0	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.33	1.0	0.25	ug/l	J
95-50-1	o-Dichlorobenzene	0.72	1.0	0.22	ug/l	J
106-46-7	p-Dichlorobenzene	0.30	1.0	0.20	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	4.5	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	114%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X031386.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.4	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.67	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.7	0.66	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.4	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.68	ug/l	
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.64	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.52	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.85	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.66	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.71	ug/l	
92-87-5	Benzidine	ND	24	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.54	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.63	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.63	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.67	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.94	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.69	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.65	ug/l	
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.66	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.68	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.82	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.64	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.61	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.73	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.65	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.65	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.76	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.55	ug/l	
132-64-9	Dibenzofuran	ND	4.7	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.7	0.94	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.7	0.94	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.94	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.76	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	0.55	4.7	0.55	ug/l	J
86-73-7	Fluorene	ND	4.7	0.72	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.65	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.90	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.75	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.70	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	0.66	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	0.65	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.71	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.91	ug/l	
91-20-3	Naphthalene	ND	4.7	0.60	ug/l	
98-95-3	Nitrobenzene	ND	4.7	0.68	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.80	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.94	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.67	ug/l	
129-00-0	Pyrene	ND	4.7	0.64	ug/l	
110-86-1	Pyridine	ND	9.4	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		14-67%
4165-62-2	Phenol-d5	29%		10-50%
118-79-6	2,4,6-Tribromophenol	94%		33-118%
4165-60-0	Nitrobenzene-d5	73%		42-108%
321-60-8	2-Fluorobiphenyl	73%		40-106%
1718-51-0	Terphenyl-d14	93%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124556.D	2	10/25/13	CP	n/a	n/a	GCD5084
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.676	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	77%		70-131%
98-08-8	aaa-Trifluorotoluene	103%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38921.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
Run #2							

	Initial Volume	Final Volume
Run #1	1080 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.188	0.23	0.093	mg/l	J
	TPH (> C22-C36)	ND	0.23	0.093	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	4740	300	29	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]
Manganese	2530	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/23/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	4.0 U	4.0	4.0	mg/l	2	10/28/13 12:04	MG	SM19 5210B
Chemical Oxygen Demand	7.4 J	20	5.3	mg/l	1	10/25/13 09:50	LE	SM19 5220C
Hydrogen Sulfide	0.50 U	1.0	0.50	mg/l	1	10/24/13 14:00	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.94	0.80	0.18	mg/l	1	11/07/13 20:34	LM	SM18 3500FED M
Iron, Ferrous [c]	3.8	0.50	0.16	mg/l	5	10/23/13 11:50	AC	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	11/04/13 12:22	VK	EPA 350.1
Nitrogen, Nitrate [d]	2.5 U	5.0	2.5	mg/l	50	10/23/13 19:26	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.0	0.53	0.17	mg/l	1	10/28/13 11:06	MG	EPA 351.2
Solids, Total Dissolved	5840	500	50	mg/l	5	10/24/13 13:05	KC	SM19 2540C
Sulfate	3020	100	30	mg/l	50	10/23/13 19:26	AA	EPA 300/SW846 9056A

(a) Estimated value. Result considered minimum due to low spike recovery.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW27		
Lab Sample ID:	FA9328-5F	**Date Sampled:**	10/22/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/23/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	2570	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9328-6	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	O19916.D	1	11/01/13	MM	n/a	n/a	VO792
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9328-6	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.20	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9328-6	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	112%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Sample vial(s) contained significant headspace; reported results are considered minimum values.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA9328

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 10222013-01
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1	SS61-MW29	SS61-MW29	10/22/13	0900	-	N	1	GW	18	X	X	X	X	X	X	X	X	X	X				1
2	Trip Blank				-	TB	1	WQ	2	X													1
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/22/13	1400	1. [signature]		
2. [signature]	10-23-13	930	2. [signature]	10-23-13	930
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7969 6691 8272
Analytical Lab: Accutest Labs
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

2.4, 20,20

5.1 5

FA9328: Chain of Custody
Page 1 of 4

bhate ENVIRONMENT INFRASTRUCTURE

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FA9328

Page: 1 of 1
Project No: 9100133
COC Number(1): 10222013-02
LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
3	SS61-MW28	SS61-MW28	10/22/13	1050	-	N	1	GW	18	X	X	X	X	X	X	X	X	X	X				2
4	Trip Blank				-	TB	1	WQ	2	X													2
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

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

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.	[signature]	10/22/13	1400	[signature]		
2.	[signature]	10-22-13	970	[signature]		
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest Labs
Lab Recipient:
Shipped No.:
Airbill Number: 7969 6691 8310
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA9328: Chain of Custody
Page 2 of 4

bhate ENVIRONMENT INFRASTRUCTURE

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FA9328

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 10222013-03
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zack Beck

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (3)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
5 SS61-MW27	SS61-MW27	10/22/13	1245	-	N	1	GW	18	X	X	X	X	X	X	X	X	X	X				3
6 Trip Blank				-	TB	1	WQ	2	X													3
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/22/13	1400	1. [signature]		
2. [signature]	10-23-13	930	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Shipped No.:
Method of Shipment: Fed Ex
Airbill Number: 7969 6691 8136
Analytical Lab: Accutest Labs
Delivery Location: Orlando, FL
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA9328: Chain of Custody
Page 3 of 4

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA9328 CLIENT: B-Hate PROJECT: SS-61

DATE/TIME RECEIVED: 10-23-13 930 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 3

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7969 6691 8272

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [x] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? 3

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.0 1.6 1.6
- [ ] CORRECTED TEMPS: 2.4, 2.0, 2.0

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [x] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: Received 1 Amber Broken (8270) Sample #5

TECHNICIAN SIGNATURE/DATE [signature] 10-23-13 REVIEWER SIGNATURE/DATE [signature] 10/23/13

NF 12/10 receipt confirmation 122910.xls

FA9328: Chain of Custody

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Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO792-MB	O19896.D	1	11/01/13	MM	n/a	n/a	VO792

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-5, FA9328-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO792-MB	O19896.D	1	11/01/13	MM	n/a	n/a	VO792

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-5, FA9328-6

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO792-MB	O19896.D	1	11/01/13	MM	n/a	n/a	VO792

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-5, FA9328-6

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-MB	P20303.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-1, FA9328-2, FA9328-3, FA9328-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-MB	P20303.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-1, FA9328-2, FA9328-3, FA9328-4

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-MB	P20303.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-1, FA9328-2, FA9328-3, FA9328-4

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	83-118%
17060-07-0	1,2-Dichloroethane-D4	113%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP769-MB	P20334.D	1	11/05/13	EG	n/a	n/a	VP769

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-3

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO792-BS	O19894.D	1	11/01/13	MM	n/a	n/a	VO792

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-5, FA9328-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	161	129	50-147
107-02-8	Acrolein	125	98.7	79	31-154
107-13-1	Acrylonitrile	125	120	96	58-126
71-43-2	Benzene	25	26.2	105	81-122
108-86-1	Bromobenzene	25	24.9	100	80-121
74-97-5	Bromochloromethane	25	22.9	92	76-123
75-27-4	Bromodichloromethane	25	25.9	104	79-123
75-25-2	Bromoform	25	24.5	98	66-123
104-51-8	n-Butylbenzene	25	26.2	105	79-126
135-98-8	sec-Butylbenzene	25	28.8	115	83-133
98-06-6	tert-Butylbenzene	25	27.9	112	80-133
108-90-7	Chlorobenzene	25	27.6	110	82-124
75-00-3	Chloroethane	25	25.1	100	62-144
67-66-3	Chloroform	25	25.3	101	80-124
95-49-8	o-Chlorotoluene	25	27.1	108	81-127
106-43-4	p-Chlorotoluene	25	27.8	111	83-130
110-75-8	2-Chloroethyl vinyl ether	125	120	96	56-122
75-15-0	Carbon disulfide	25	21.5	86	66-148
56-23-5	Carbon tetrachloride	25	25.2	101	76-136
75-34-3	1,1-Dichloroethane	25	26.0	104	81-122
75-35-4	1,1-Dichloroethylene	25	28.5	114	78-137
563-58-6	1,1-Dichloropropene	25	26.7	107	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	23.8	95	64-123
106-93-4	1,2-Dibromoethane	25	25.0	100	75-120
107-06-2	1,2-Dichloroethane	25	25.8	103	75-125
78-87-5	1,2-Dichloropropane	25	25.4	102	76-124
142-28-9	1,3-Dichloropropane	25	24.9	100	80-118
594-20-7	2,2-Dichloropropane	25	26.7	107	74-139
124-48-1	Dibromochloromethane	25	25.1	100	78-122
75-71-8	Dichlorodifluoromethane	25	41.5	166	42-167
156-59-2	cis-1,2-Dichloroethylene	25	25.0	100	78-120
10061-01-5	cis-1,3-Dichloropropene	25	25.5	102	75-118
541-73-1	m-Dichlorobenzene	25	27.2	109	84-125
95-50-1	o-Dichlorobenzene	25	26.6	106	82-124
106-46-7	p-Dichlorobenzene	25	24.9	100	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.7	107	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO792-BS	O19894.D	1	11/01/13	MM	n/a	n/a	VO792

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-5, FA9328-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	26.3	105	80-120
100-41-4	Ethylbenzene	25	25.9	104	81-121
591-78-6	2-Hexanone	125	130	104	61-129
87-68-3	Hexachlorobutadiene	25	27.1	108	75-142
110-54-3	Hexane	25	23.9	96	69-132
98-82-8	Isopropylbenzene	25	29.0	116	83-132
99-87-6	p-Isopropyltoluene	25	27.2	109	79-130
108-10-1	4-Methyl-2-pentanone	125	126	101	66-122
74-83-9	Methyl bromide	25	27.0	108	59-143
74-87-3	Methyl chloride	25	28.8	115	50-159
74-95-3	Methylene bromide	25	25.0	100	78-119
75-09-2	Methylene chloride	25	27.1	108	69-135
78-93-3	Methyl ethyl ketone	125	134	107	56-143
1634-04-4	Methyl Tert Butyl Ether	25	22.4	90	72-117
91-20-3	Naphthalene	25	23.9	96	63-132
103-65-1	n-Propylbenzene	25	28.6	114	82-133
100-42-5	Styrene	25	25.1	100	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.5	102	77-122
71-55-6	1,1,1-Trichloroethane	25	27.7	111	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	23.6	94	72-120
79-00-5	1,1,2-Trichloroethane	25	24.6	98	76-119
87-61-6	1,2,3-Trichlorobenzene	25	25.3	101	68-131
96-18-4	1,2,3-Trichloropropane	25	25.1	100	77-120
120-82-1	1,2,4-Trichlorobenzene	25	25.3	101	73-129
95-63-6	1,2,4-Trimethylbenzene	25	26.3	105	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.5	102	79-120
127-18-4	Tetrachloroethylene	25	26.0	104	76-135
108-88-3	Toluene	25	25.4	102	80-120
79-01-6	Trichloroethylene	25	26.5	106	81-126
75-69-4	Trichlorofluoromethane	25	23.0	92	71-156
75-01-4	Vinyl chloride	25	29.4	118	69-159
108-05-4	Vinyl Acetate	125	130	104	43-154
	m,p-Xylene	50	54.7	109	79-126
95-47-6	o-Xylene	25	28.0	112	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO792-BS	O19894.D	1	11/01/13	MM	n/a	n/a	VO792

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-5, FA9328-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	94%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-BS	P20302.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-1, FA9328-2, FA9328-3, FA9328-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	222	178*	50-147
107-02-8	Acrolein	125	106	85	31-154
107-13-1	Acrylonitrile	125	120	96	58-126
71-43-2	Benzene	25	26.7	107	81-122
108-86-1	Bromobenzene	25	24.6	98	80-121
74-97-5	Bromochloromethane	25	23.8	95	76-123
75-27-4	Bromodichloromethane	25	27.6	110	79-123
75-25-2	Bromoform	25	24.7	99	66-123
104-51-8	n-Butylbenzene	25	24.5	98	79-126
135-98-8	sec-Butylbenzene	25	28.8	115	83-133
98-06-6	tert-Butylbenzene	25	26.4	106	80-133
108-90-7	Chlorobenzene	25	27.4	110	82-124
75-00-3	Chloroethane	25	23.9	96	62-144
67-66-3	Chloroform	25	26.6	106	80-124
95-49-8	o-Chlorotoluene	25	27.1	108	81-127
106-43-4	p-Chlorotoluene	25	27.5	110	83-130
110-75-8	2-Chloroethyl vinyl ether	125	139	111	56-122
75-15-0	Carbon disulfide	25	19.6	78	66-148
56-23-5	Carbon tetrachloride	25	27.0	108	76-136
75-34-3	1,1-Dichloroethane	25	26.2	105	81-122
75-35-4	1,1-Dichloroethylene	25	28.3	113	78-137
563-58-6	1,1-Dichloropropene	25	29.3	117	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	25.7	103	64-123
106-93-4	1,2-Dibromoethane	25	26.9	108	75-120
107-06-2	1,2-Dichloroethane	25	27.5	110	75-125
78-87-5	1,2-Dichloropropane	25	24.8	99	76-124
142-28-9	1,3-Dichloropropane	25	26.8	107	80-118
594-20-7	2,2-Dichloropropane	25	22.2	89	74-139
124-48-1	Dibromochloromethane	25	25.9	104	78-122
75-71-8	Dichlorodifluoromethane	25	43.0	172*	42-167
156-59-2	cis-1,2-Dichloroethylene	25	25.1	100	78-120
10061-01-5	cis-1,3-Dichloropropene	25	25.4	102	75-118
541-73-1	m-Dichlorobenzene	25	26.6	106	84-125
95-50-1	o-Dichlorobenzene	25	25.5	102	82-124
106-46-7	p-Dichlorobenzene	25	25.2	101	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.6	106	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-BS	P20302.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-1, FA9328-2, FA9328-3, FA9328-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	28.3	113	80-120
100-41-4	Ethylbenzene	25	26.3	105	81-121
591-78-6	2-Hexanone	125	151	121	61-129
87-68-3	Hexachlorobutadiene	25	25.2	101	75-142
110-54-3	Hexane	25	25.9	104	69-132
98-82-8	Isopropylbenzene	25	26.4	106	83-132
99-87-6	p-Isopropyltoluene	25	27.3	109	79-130
108-10-1	4-Methyl-2-pentanone	125	138	110	66-122
74-83-9	Methyl bromide	25	23.9	96	59-143
74-87-3	Methyl chloride	25	30.6	122	50-159
74-95-3	Methylene bromide	25	26.6	106	78-119
75-09-2	Methylene chloride	25	24.9	100	69-135
78-93-3	Methyl ethyl ketone	125	164	131	56-143
1634-04-4	Methyl Tert Butyl Ether	25	22.5	90	72-117
91-20-3	Naphthalene	25	23.4	94	63-132
103-65-1	n-Propylbenzene	25	28.2	113	82-133
100-42-5	Styrene	25	25.5	102	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	26.5	106	77-122
71-55-6	1,1,1-Trichloroethane	25	25.6	102	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	26.6	106	72-120
79-00-5	1,1,2-Trichloroethane	25	28.6	114	76-119
87-61-6	1,2,3-Trichlorobenzene	25	24.1	96	68-131
96-18-4	1,2,3-Trichloropropane	25	25.3	101	77-120
120-82-1	1,2,4-Trichlorobenzene	25	21.8	87	73-129
95-63-6	1,2,4-Trimethylbenzene	25	24.8	99	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.4	102	79-120
127-18-4	Tetrachloroethylene	25	27.8	111	76-135
108-88-3	Toluene	25	26.6	106	80-120
79-01-6	Trichloroethylene	25	27.2	109	81-126
75-69-4	Trichlorofluoromethane	25	24.5	98	71-156
75-01-4	Vinyl chloride	25	29.3	117	69-159
108-05-4	Vinyl Acetate	125	123	98	43-154
	m,p-Xylene	50	55.2	110	79-126
95-47-6	o-Xylene	25	26.9	108	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-BS	P20302.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-1, FA9328-2, FA9328-3, FA9328-4

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	97%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP769-BS	P20333.D	1	11/05/13	EG	n/a	n/a	VP769

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-82-8	Isopropylbenzene	25	26.7	107	83-132

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	96%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9297-8MS	O19917.D	1	11/01/13	MM	n/a	n/a	VO792
FA9297-8MSD	O19918.D	1	11/01/13	MM	n/a	n/a	VO792
FA9297-8	O19897.D	1	11/01/13	MM	n/a	n/a	VO792

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-5, FA9328-6

CAS No.	Compound	FA9297-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	104	83	108	86	4	50-147/21
107-02-8	Acrolein	ND		125	76.9	62	69.8	56	10	31-154/29
107-13-1	Acrylonitrile	ND		125	105	84	104	83	1	58-126/16
71-43-2	Benzene	ND		25	24.0	96	22.9	92	5	81-122/14
108-86-1	Bromobenzene	ND		25	23.6	94	23.7	95	0	80-121/14
74-97-5	Bromochloromethane	ND		25	22.5	90	21.9	88	3	76-123/14
75-27-4	Bromodichloromethane	ND		25	26.0	104	23.2	93	11	79-123/19
75-25-2	Bromoform	ND		25	22.3	89	21.6	86	3	66-123/21
104-51-8	n-Butylbenzene	ND		25	24.4	98	24.0	96	2	79-126/16
135-98-8	sec-Butylbenzene	ND		25	27.1	108	26.8	107	1	83-133/16
98-06-6	tert-Butylbenzene	ND		25	27.9	112	28.0	112	0	80-133/16
108-90-7	Chlorobenzene	ND		25	27.2	109	26.5	106	3	82-124/14
75-00-3	Chloroethane	ND		25	18.5	74	19.4	78	5	62-144/20
67-66-3	Chloroform	0.28	J	25	26.0	103	25.1	99	4	80-124/15
95-49-8	o-Chlorotoluene	ND		25	26.0	104	26.0	104	0	81-127/15
106-43-4	p-Chlorotoluene	ND		25	26.6	106	26.7	107	0	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		125	ND	0*	ND	0*	nc	56-122/23
75-15-0	Carbon disulfide	ND		25	16.3	65*	14.8	59*	10	66-148/23
56-23-5	Carbon tetrachloride	ND		25	26.9	108	23.6	94	13	76-136/23
75-34-3	1,1-Dichloroethane	ND		25	24.7	99	23.9	96	3	81-122/15
75-35-4	1,1-Dichloroethylene	0.23	J	25	28.8	114	28.4	113	1	78-137/18
563-58-6	1,1-Dichloropropene	ND		25	26.1	104	25.3	101	3	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	24.9	100	24.2	97	3	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	23.7	95	23.7	95	0	75-120/13
107-06-2	1,2-Dichloroethane	ND		25	30.3	121	29.3	117	3	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	22.1	88	21.5	86	3	76-124/14
142-28-9	1,3-Dichloropropane	ND		25	23.2	93	22.8	91	2	80-118/13
594-20-7	2,2-Dichloropropane	ND		25	24.2	97	22.9	92	6	74-139/17
124-48-1	Dibromochloromethane	ND		25	23.6	94	21.4	86	10	78-122/19
75-71-8	Dichlorodifluoromethane	ND		25	42.4	170*	41.6	166	2	42-167/19
156-59-2	cis-1,2-Dichloroethylene	9.5		25	32.6	92	31.3	87	4	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	22.1	88	20.1	80	9	75-118/23
541-73-1	m-Dichlorobenzene	ND		25	26.5	106	26.4	106	0	84-125/14
95-50-1	o-Dichlorobenzene	ND		25	25.9	104	26.8	107	3	82-124/14
106-46-7	p-Dichlorobenzene	ND		25	24.5	98	24.5	98	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	25.3	101	23.8	95	6	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9297-8MS	O19917.D	1	11/01/13	MM	n/a	n/a	VO792
FA9297-8MSD	O19918.D	1	11/01/13	MM	n/a	n/a	VO792
FA9297-8	O19897.D	1	11/01/13	MM	n/a	n/a	VO792

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-5, FA9328-6

CAS No.	Compound	FA9297-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		25	24.0	96	22.3	89	7	80-120/22
100-41-4	Ethylbenzene	ND		25	25.3	101	24.9	100	2	81-121/14
591-78-6	2-Hexanone	ND		125	133	106	140	112	5	61-129/18
87-68-3	Hexachlorobutadiene	ND		25	24.7	99	24.6	98	0	75-142/19
110-54-3	Hexane	ND		25	21.0	84	19.8	79	6	69-132/20
98-82-8	Isopropylbenzene	ND		25	28.9	116	28.0	112	3	83-132/15
99-87-6	p-Isopropyltoluene	ND		25	25.8	103	25.5	102	1	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		125	133	106	139	111	4	66-122/16
74-83-9	Methyl bromide	ND		25	20.6	82	21.6	86	5	59-143/19
74-87-3	Methyl chloride	ND		25	23.8	95	25.7	103	8	50-159/19
74-95-3	Methylene bromide	ND		25	26.3	105	26.3	105	0	78-119/14
75-09-2	Methylene chloride	ND		25	27.3	109	26.3	105	4	69-135/16
78-93-3	Methyl ethyl ketone	ND		125	127	102	131	105	3	56-143/18
1634-04-4	Methyl Tert Butyl Ether	ND		25	22.1	88	21.9	88	1	72-117/14
91-20-3	Naphthalene	ND		25	21.9	88	23.3	93	6	63-132/25
103-65-1	n-Propylbenzene	ND		25	26.9	108	26.5	106	1	82-133/15
100-42-5	Styrene	ND		25	23.1	92	21.6	86	7	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		25	26.5	106	24.6	98	7	77-122/19
71-55-6	1,1,1-Trichloroethane	0.42	J	25	29.6	117	28.3	112	4	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	23.2	93	24.1	96	4	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		25	23.9	96	23.4	94	2	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	23.2	93	24.6	98	6	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		25	24.7	99	26.2	105	6	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		25	22.8	91	23.5	94	3	73-129/20
95-63-6	1,2,4-Trimethylbenzene	ND		25	24.0	96	23.5	94	2	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		25	24.3	97	24.0	96	1	79-120/19
127-18-4	Tetrachloroethylene	42.6		25	64.6	88	61.6	76	5	76-135/16
108-88-3	Toluene	ND		25	23.7	95	23.2	93	2	80-120/14
79-01-6	Trichloroethylene	7.0		25	34.2	109	33.9	108	1	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	24.3	97	22.8	91	6	71-156/21
75-01-4	Vinyl chloride	ND		25	20.5	82	22.7	91	10	69-159/18
108-05-4	Vinyl Acetate	ND		125	134	107	131	105	2	43-154/14
	m,p-Xylene	ND		50	53.3	107	51.9	104	3	79-126/15
95-47-6	o-Xylene	ND		25	27.1	108	26.5	106	2	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9297-8MS	O19917.D	1	11/01/13	MM	n/a	n/a	VO792
FA9297-8MSD	O19918.D	1	11/01/13	MM	n/a	n/a	VO792
FA9297-8	O19897.D	1	11/01/13	MM	n/a	n/a	VO792

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-5, FA9328-6

CAS No.	Surrogate Recoveries	MS	MSD	FA9297-8	Limits
1868-53-7	Dibromofluoromethane	103%	101%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	110%	109%	97%	79-125%
2037-26-5	Toluene-D8	95%	96%	100%	85-112%
460-00-4	4-Bromofluorobenzene	97%	100%	101%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9480-11MS	P20313.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11MSD	P20314.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11	P20311.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-1, FA9328-2, FA9328-3, FA9328-4

CAS No.	Compound	FA9480-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U		125	139	111	152	122	9	50-147/21
107-02-8	Acrolein	20 U		125	89.2	71	79.4	64	12	31-154/29
107-13-1	Acrylonitrile	10 U		125	110	88	116	93	5	58-126/16
71-43-2	Benzene	1.0 U		25	28.3	113	27.7	111	2	81-122/14
108-86-1	Bromobenzene	1.0 U		25	26.0	104	26.5	106	2	80-121/14
74-97-5	Bromochloromethane	1.0 U		25	26.2	105	24.5	98	7	76-123/14
75-27-4	Bromodichloromethane	1.0 U		25	29.0	116	24.8	99	16	79-123/19
75-25-2	Bromoform	1.0 U		25	22.9	92	21.0	84	9	66-123/21
104-51-8	n-Butylbenzene	1.0 U		25	26.3	105	25.8	103	2	79-126/16
135-98-8	sec-Butylbenzene	1.0 U		25	30.7	123	29.2	117	5	83-133/16
98-06-6	tert-Butylbenzene	1.0 U		25	29.3	117	27.7	111	6	80-133/16
108-90-7	Chlorobenzene	1.0 U		25	27.8	111	26.8	107	4	82-124/14
75-00-3	Chloroethane	2.0 U		25	24.8	99	24.9	100	0	62-144/20
67-66-3	Chloroform	0.30	J	25	28.3	112	27.2	108	4	80-124/15
95-49-8	o-Chlorotoluene	1.0 U		25	29.4	118	28.7	115	2	81-127/15
106-43-4	p-Chlorotoluene	1.0 U		25	29.9	120	29.9	120	0	83-130/15
110-75-8	2-Chloroethyl vinyl ether	5.0 U		125	6.9	6*	ND	0*	200*	56-122/23
75-15-0	Carbon disulfide	2.0 U		25	16.1	64*	14.4	58*	11	66-148/23
56-23-5	Carbon tetrachloride	1.0 U		25	28.7	115	23.9	96	18	76-136/23
75-34-3	1,1-Dichloroethane	1.0 U		25	28.2	113	26.9	108	5	81-122/15
75-35-4	1,1-Dichloroethylene	1.0 U		25	29.0	116	29.0	116	0	78-137/18
563-58-6	1,1-Dichloropropene	1.0 U		25	31.2	125	30.2	121	3	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U		25	27.0	108	25.2	101	7	64-123/18
106-93-4	1,2-Dibromoethane	1.0 U		25	27.1	108	26.5	106	2	75-120/13
107-06-2	1,2-Dichloroethane	1.0 U		25	28.7	115	28.8	115	0	75-125/14
78-87-5	1,2-Dichloropropane	1.0 U		25	26.5	106	26.7	107	1	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U		25	27.5	110	27.0	108	2	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U		25	23.3	93	23.2	93	0	74-139/17
124-48-1	Dibromochloromethane	1.0 U		25	25.5	102	22.4	90	13	78-122/19
75-71-8	Dichlorodifluoromethane	2.0 U		25	43.0	172*	38.9	156	10	42-167/19
156-59-2	cis-1,2-Dichloroethylene	1.0 U		25	26.6	106	25.3	101	5	78-120/15
10061-01-5	cis-1,3-Dichloropropene	1.0 U		25	25.1	100	21.2	85	17	75-118/23
541-73-1	m-Dichlorobenzene	1.0 U		25	29.8	119	28.4	114	5	84-125/14
95-50-1	o-Dichlorobenzene	1.0 U		25	27.7	111	26.6	106	4	82-124/14
106-46-7	p-Dichlorobenzene	1.0 U		25	27.7	111	26.3	105	5	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U		25	29.0	116	27.4	110	6	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9480-11MS	P20313.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11MSD	P20314.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11	P20311.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-1, FA9328-2, FA9328-3, FA9328-4

CAS No.	Compound	FA9480-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	1.0 U		25	27.8	111	24.3	97	13	80-120/22
100-41-4	Ethylbenzene	1.0 U		25	27.8	111	26.9	108	3	81-121/14
591-78-6	2-Hexanone	10 U		125	131	105	136	109	4	61-129/18
87-68-3	Hexachlorobutadiene	2.0 U		25	26.5	106	27.4	110	3	75-142/19
110-54-3	Hexane	2.0 U		25	27.4	110	26.4	106	4	69-132/20
98-82-8	Isopropylbenzene	1.0 U		25	28.1	112	27.2	109	3	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U		25	29.3	117	28.8	115	2	79-130/16
108-10-1	4-Methyl-2-pentanone	5.0 U		125	136	109	143	114	5	66-122/16
74-83-9	Methyl bromide	2.0 U		25	25.6	102	24.7	99	4	59-143/19
74-87-3	Methyl chloride	2.0 U		25	28.5	114	29.4	118	3	50-159/19
74-95-3	Methylene bromide	2.0 U		25	28.5	114	28.7	115	1	78-119/14
75-09-2	Methylene chloride	5.0 U		25	27.0	108	26.1	104	3	69-135/16
78-93-3	Methyl ethyl ketone	5.0 U		125	139	111	142	114	2	56-143/18
1634-04-4	Methyl Tert Butyl Ether	1.0 U		25	24.6	98	24.6	98	0	72-117/14
91-20-3	Naphthalene	5.0 U		25	23.7	95	26.2	105	10	63-132/25
103-65-1	n-Propylbenzene	1.0 U		25	30.6	122	29.2	117	5	82-133/15
100-42-5	Styrene	1.0 U		25	27.2	109	26.0	104	5	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U		25	27.3	109	24.4	98	11	77-122/19
71-55-6	1,1,1-Trichloroethane	1.0 U		25	26.8	107	26.7	107	0	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U		25	26.9	108	26.9	108	0	72-120/14
79-00-5	1,1,2-Trichloroethane	2.0		25	29.5	110	29.6	110	0	76-119/14
87-61-6	1,2,3-Trichlorobenzene	1.0 U		25	23.9	96	26.3	105	10	68-131/25
96-18-4	1,2,3-Trichloropropane	2.0 U		25	27.7	111	31.0	124*	11	77-120/16
120-82-1	1,2,4-Trichlorobenzene	1.0 U		25	21.7	87	23.5	94	8	73-129/20
95-63-6	1,2,4-Trimethylbenzene	2.0 U		25	27.5	110	26.1	104	5	79-120/18
108-67-8	1,3,5-Trimethylbenzene	2.0 U		25	27.7	111	26.8	107	3	79-120/19
127-18-4	Tetrachloroethylene	1.0 U		25	27.1	108	25.3	101	7	76-135/16
108-88-3	Toluene	1.0 U		25	27.7	111	27.1	108	2	80-120/14
79-01-6	Trichloroethylene	93.5		25	121	110	120	106	1	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U		25	24.9	100	23.3	93	7	71-156/21
75-01-4	Vinyl chloride	1.0 U		25	29.4	118	28.9	116	2	69-159/18
108-05-4	Vinyl Acetate	10 U		125	121	97	120	96	1	43-154/14
	m,p-Xylene	2.0 U		50	58.7	117	56.3	113	4	79-126/15
95-47-6	o-Xylene	1.0 U		25	28.5	114	28.3	113	1	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9480-11MS	P20313.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11MSD	P20314.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11	P20311.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-1, FA9328-2, FA9328-3, FA9328-4

CAS No.	Surrogate Recoveries	MS	MSD	FA9480-11	Limits
1868-53-7	Dibromofluoromethane	101%	100%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	106%	103%	79-125%
2037-26-5	Toluene-D8	97%	94%	99%	85-112%
460-00-4	4-Bromofluorobenzene	96%	97%	105%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9375-5MS	P20344.D	10	11/05/13	EG	n/a	n/a	VP769
FA9375-5MSD	P20345.D	10	11/05/13	EG	n/a	n/a	VP769
FA9375-5	P20341.D	10	11/05/13	EG	n/a	n/a	VP769

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9328-3

CAS No.	Compound	FA9375-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-82-8	Isopropylbenzene	323		250	617	118	600	111	3	83-132/15

CAS No.	Surrogate Recoveries	MS	MSD	FA9375-5	Limits
1868-53-7	Dibromofluoromethane	101%	97%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	102%	105%	79-125%
2037-26-5	Toluene-D8	97%	96%	98%	85-112%
460-00-4	4-Bromofluorobenzene	95%	99%	102%	83-118%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MB	X031383.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MB	X031383.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MB	X031383.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9328-1, FA9328-3, FA9328-5

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	69%	42-108%
321-60-8	2-Fluorobiphenyl	69%	40-106%
1718-51-0	Terphenyl-d14	94%	39-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile [a]		0	ug/l	

(a) No TICs detected.

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-BS	X031382.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	13.3	13	10-69
95-57-8	2-Chlorophenol	50	27.3	55	52-98
59-50-7	4-Chloro-3-methyl phenol	50	31.5	63	54-103
120-83-2	2,4-Dichlorophenol	50	31.3	63	53-103
105-67-9	2,4-Dimethylphenol	50	26.3	53	43-90
51-28-5	2,4-Dinitrophenol	100	71.4	71	44-112
534-52-1	4,6-Dinitro-o-cresol	100	86.7	87	66-121
95-48-7	2-Methylphenol	50	22.0	44	43-90
	3&4-Methylphenol	100	40.6	41	36-88
88-75-5	2-Nitrophenol	50	31.4	63	53-102
100-02-7	4-Nitrophenol	100	20.0	20	18-62
87-86-5	Pentachlorophenol	100	83.4	83	61-115
108-95-2	Phenol	50	11.4	23	19-56
95-95-4	2,4,5-Trichlorophenol	50	35.9	72	62-109
88-06-2	2,4,6-Trichlorophenol	50	35.6	71	59-107
83-32-9	Acenaphthene	50	36.1	72	61-107
208-96-8	Acenaphthylene	50	37.1	74	60-104
62-53-3	Aniline	50	30.6	61	47-100
120-12-7	Anthracene	50	40.3	81	65-108
92-87-5	Benzidine	50	26.9	54	25-99
56-55-3	Benzo(a)anthracene	50	39.6	79	66-111
50-32-8	Benzo(a)pyrene	50	38.4	77	62-107
205-99-2	Benzo(b)fluoranthene	50	38.6	77	65-114
191-24-2	Benzo(g,h,i)perylene	50	43.5	87	66-116
207-08-9	Benzo(k)fluoranthene	50	40.7	81	65-114
101-55-3	4-Bromophenyl phenyl ether	50	33.1	66	65-109
85-68-7	Butyl benzyl phthalate	50	38.6	77	65-112
100-51-6	Benzyl Alcohol	50	26.0	52	46-94
91-58-7	2-Chloronaphthalene	50	33.5	67	57-103
106-47-8	4-Chloroaniline	50	33.3	67	49-105
86-74-8	Carbazole	50	39.9	80	59-113
218-01-9	Chrysene	50	42.1	84	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	32.2	64	51-102
111-44-4	bis(2-Chloroethyl)ether	50	29.8	60	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	30.7	61	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	34.9	70	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-BS	X031382.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	28.8	58	48-97
122-66-7	1,2-Diphenylhydrazine	50	38.3	77	61-110
541-73-1	1,3-Dichlorobenzene	50	30.4	61	45-95
106-46-7	1,4-Dichlorobenzene	50	30.0	60	45-98
121-14-2	2,4-Dinitrotoluene	50	37.0	74	61-110
606-20-2	2,6-Dinitrotoluene	50	36.5	73	63-108
91-94-1	3,3'-Dichlorobenzidine	50	43.4	87	46-117
53-70-3	Dibenzo(a,h)anthracene	50	41.4	83	66-119
132-64-9	Dibenzofuran	50	37.1	74	61-106
84-74-2	Di-n-butyl phthalate	50	38.0	76	65-107
117-84-0	Di-n-octyl phthalate	50	37.4	75	62-118
84-66-2	Diethyl phthalate	50	36.7	73	64-108
131-11-3	Dimethyl phthalate	50	36.6	73	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	40.3	81	61-117
206-44-0	Fluoranthene	50	39.8	80	63-106
86-73-7	Fluorene	50	39.1	78	62-108
118-74-1	Hexachlorobenzene	50	38.7	77	63-108
87-68-3	Hexachlorobutadiene	50	32.6	65	42-102
77-47-4	Hexachlorocyclopentadiene	50	25.1	50	39-102
67-72-1	Hexachloroethane	50	30.0	60	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	40.1	80	64-119
78-59-1	Isophorone	50	30.6	61	43-87
90-12-0	1-Methylnaphthalene	50	32.7	65	53-102
91-57-6	2-Methylnaphthalene	50	32.3	65	51-102
88-74-4	2-Nitroaniline	50	38.5	77	54-128
99-09-2	3-Nitroaniline	50	38.3	77	56-106
100-01-6	4-Nitroaniline	50	39.3	79	55-120
91-20-3	Naphthalene	50	35.0	70	47-100
98-95-3	Nitrobenzene	50	31.2	62	50-104
62-75-9	N-Nitrosodimethylamine	50	16.5	33	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	31.2	62	52-104
86-30-6	N-Nitrosodiphenylamine	50	38.6	77	64-108
85-01-8	Phenanthrene	50	40.9	82	66-110
129-00-0	Pyrene	50	38.6	77	64-113
110-86-1	Pyridine	50	16.3	33	23-74
120-82-1	1,2,4-Trichlorobenzene	50	30.3	61	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-BS	X031382.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9328-1, FA9328-3, FA9328-5

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	65%	42-108%
321-60-8	2-Fluorobiphenyl	69%	40-106%
1718-51-0	Terphenyl-d14	85%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MS	X031391.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
OP49203-MSD	X031392.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
JB51048-3	T010374.D	1	11/05/13	FS	10/29/13	OP49203	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	JB51048-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		200	85.5	43	69.5	35	21	10-69/39
95-57-8	2-Chlorophenol	ND		100	69.2	69	65.5	66	5	52-98/25
59-50-7	4-Chloro-3-methyl phenol	ND		100	78.1	78	76.7	77	2	54-103/23
120-83-2	2,4-Dichlorophenol	ND		100	74.5	75	70.9	71	5	53-103/26
105-67-9	2,4-Dimethylphenol	ND		100	77.7	78	74.3	74	4	43-90/27
51-28-5	2,4-Dinitrophenol	ND		200	153	77	137	69	11	44-112/25
534-52-1	4,6-Dinitro-o-cresol	ND		200	178	89	165	83	8	66-121/23
95-48-7	2-Methylphenol	ND		100	66.5	67	66.8	67	0	43-90/28
	3&4-Methylphenol	ND		200	135	68	136	68	1	36-88/28
88-75-5	2-Nitrophenol	ND		100	74.6	75	70.1	70	6	53-102/29
100-02-7	4-Nitrophenol	ND		200	103	52	104	52	1	18-62/33
87-86-5	Pentachlorophenol	ND		200	192	96	177	89	8	61-115/26
108-95-2	Phenol	ND		100	45.5	46	47.8	48	5	19-56/35
95-95-4	2,4,5-Trichlorophenol	ND		100	83.4	83	79.8	80	4	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		100	81.9	82	78.3	78	4	59-107/23
83-32-9	Acenaphthene	1.3	J	100	88.3	87	82.8	82	6	61-107/22
208-96-8	Acenaphthylene	ND		100	87.5	88	83.7	84	4	60-104/22
62-53-3	Aniline	3.9	J	100	99.7	96	94.9	91	5	47-100/30
120-12-7	Anthracene	ND		100	88.2	88	84.9	85	4	65-108/20
92-87-5	Benzidine	59.5		100	13.6	-46*	31.5	-28*	79*	25-99/31
56-55-3	Benzo(a)anthracene	ND		100	87.6	88	86.8	87	1	66-111/22
50-32-8	Benzo(a)pyrene	ND		100	84.5	85	82.9	83	2	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		100	84.7	85	83.8	84	1	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		100	93.3	93	88.5	89	5	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		100	83.1	83	85.5	86	3	65-114/24
101-55-3	4-Bromophenyl phenyl ether	ND		100	71.4	71	68.4	68	4	65-109/23
85-68-7	Butyl benzyl phthalate	ND		100	84.1	84	88.7	89	5	65-112/24
100-51-6	Benzyl Alcohol	ND		100	81.7	82	81.3	81	0	46-94/27
91-58-7	2-Chloronaphthalene	ND		100	80.2	80	76.7	77	4	57-103/23
106-47-8	4-Chloroaniline	11.1		100	84.5	73	81.5	70	4	49-105/27
86-74-8	Carbazole	ND		100	87.8	88	85.1	85	3	59-113/21
218-01-9	Chrysene	ND		100	92.1	92	88.3	88	4	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	ND		100	78.1	78	73.6	74	6	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		100	72.1	72	69.2	69	4	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	75.7	76	73.9	74	2	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	81.0	81	77.7	78	4	62-105/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MS	X031391.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
OP49203-MSD	X031392.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
JB51048-3	T010374.D	1	11/05/13	FS	10/29/13	OP49203	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	JB51048-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		100	71.4	71	70.7	71	1	48-97/24
122-66-7	1,2-Diphenylhydrazine	ND		100	87.0	87	82.8	83	5	61-110/24
541-73-1	1,3-Dichlorobenzene	ND		100	73.2	73	69.7	70	5	45-95/25
106-46-7	1,4-Dichlorobenzene	ND		100	75.2	75	72.3	72	4	45-98/25
121-14-2	2,4-Dinitrotoluene	ND		100	82.4	82	79.1	79	4	61-110/21
606-20-2	2,6-Dinitrotoluene	ND		100	81.4	81	77.5	78	5	63-108/21
91-94-1	3,3'-Dichlorobenzidine	4.5	J	100	73.6	69	75.4	71	2	46-117/29
53-70-3	Dibenzo(a,h)anthracene	ND		100	87.9	88	83.6	84	5	66-119/24
132-64-9	Dibenzofuran	ND		100	85.2	85	82.3	82	3	61-106/21
84-74-2	Di-n-butyl phthalate	ND		100	85.7	86	81.0	81	6	65-107/21
117-84-0	Di-n-octyl phthalate	ND		100	82.9	83	89.2	89	7	62-118/24
84-66-2	Diethyl phthalate	ND		100	82.5	83	80.2	80	3	64-108/21
131-11-3	Dimethyl phthalate	ND		100	80.7	81	78.0	78	3	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	1.4	J	100	89.2	88	91.8	90	3	61-117/23
206-44-0	Fluoranthene	0.84	J	100	91.3	90	84.4	84	8	63-106/21
86-73-7	Fluorene	ND		100	92.2	92	87.2	87	6	62-108/20
118-74-1	Hexachlorobenzene	ND		100	83.7	84	81.0	81	3	63-108/22
87-68-3	Hexachlorobutadiene	ND		100	78.4	78	74.5	75	5	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND		100	51.8	52	48.0	48	8	39-102/29
67-72-1	Hexachloroethane	ND		100	73.5	74	72.9	73	1	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	87.2	87	81.7	82	7	64-119/24
78-59-1	Isophorone	ND		100	73.8	74	70.1	70	5	43-87/25
90-12-0	1-Methylnaphthalene	4.4	J	100	91.1	87	86.3	82	5	53-102/27
91-57-6	2-Methylnaphthalene	ND		100	79.8	80	77.6	78	3	51-102/26
88-74-4	2-Nitroaniline	ND		100	87.1	87	83.3	83	4	54-128/24
99-09-2	3-Nitroaniline	ND		100	84.6	85	82.6	83	2	56-106/27
100-01-6	4-Nitroaniline	ND		100	89.8	90	86.6	87	4	55-120/24
91-20-3	Naphthalene	5.4		100	87.1	82	82.5	77	5	47-100/29
98-95-3	Nitrobenzene	ND		100	74.7	75	72.9	73	2	50-104/28
62-75-9	N-Nitrosodimethylamine	ND		100	68.1	68	67.6	68	1	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	ND		100	76.4	76	74.5	75	3	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND		100	101	101	96.5	97	5	64-108/23
85-01-8	Phenanthrene	ND		100	88.7	89	85.3	85	4	66-110/21
129-00-0	Pyrene	0.87	J	100	83.6	83	97.0	96	15	64-113/23
110-86-1	Pyridine	ND		100	67.3	67	67.7	68	1	23-74/34
120-82-1	1,2,4-Trichlorobenzene	ND		100	73.3	73	70.1	70	4	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MS	X031391.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
OP49203-MSD	X031392.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
JB51048-3	T010374.D	1	11/05/13	FS	10/29/13	OP49203	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9328-1, FA9328-3, FA9328-5

CAS No.	Surrogate Recoveries	MS	MSD	JB51048-3	Limits
4165-60-0	Nitrobenzene-d5	75%	73%	76%	42-108%
321-60-8	2-Fluorobiphenyl	81%	77%	79%	40-106%
1718-51-0	Terphenyl-d14	90%	89%	86%	39-121%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5084-MB	CD124542.D	1	10/25/13	CP	n/a	n/a	GCD5084

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	76%	70-131%
98-08-8	aaa-Trifluorotoluene	90%	69-143%

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5084-BS	CD124541.D	1	10/25/13	CP	n/a	n/a	GCD5084

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.428	107	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	85%	70-131%
98-08-8	aaa-Trifluorotoluene	106%	69-143%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9288-1MS	CD124549.D	1	10/25/13	CP	n/a	n/a	GCD5084
FA9288-1MSD	CD124550.D	1	10/25/13	CP	n/a	n/a	GCD5084
FA9288-1	CD124548.D	1	10/25/13	CP	n/a	n/a	GCD5084

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	FA9288-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.0967	J	0.4	0.508	103	0.504	102	1	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA9288-1	Limits
460-00-4	4-Bromofluorobenzene	91%	96%	85%	70-131%
98-08-8	aaa-Trifluorotoluene	106%	108%	97%	69-143%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49193-MB	YY38914.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	55%	50-131%

Blank Spike Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49193-BS	YY38913.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.601	60	56-123
	TPH (> C22-C36)	1	0.763	76	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	64%	50-131%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9328
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49193-MS	YY38916.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
OP49193-MSD	YY38917.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
FA9288-1	YY38915.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9328-1, FA9328-3, FA9328-5

CAS No.	Compound	FA9288-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	1.76		1.85	1.77	1*	2.64	48*	39*	56-123/33
	TPH (> C22-C36)	0.101	J	1.85	1.19	59*	1.56	79	27	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA9288-1	Limits
84-15-1	o-Terphenyl	49%* [a]	69%	72%	50-131%

(a) Outside control limits.

9.3.1

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA9328
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:					11/06/13		11/06/13		11/06/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Aluminum	200	15	15						
Antimony	6.0	1.3	1.3						
Arsenic	10	1.6	2.5						
Barium	200	1	1						
Beryllium	4.0	.5	.5						
Cadmium	5.0	.5	.5						
Calcium	1000	50	50						
Chromium	10	1.8	2						
Cobalt	50	.5	.5						
Copper	25	1	1						
Iron	300	29	29	-8.4	<300	-8.5	<300	-10	<300
Lead	5.0	1.1	1.1						
Magnesium	5000	74	74						
Manganese	15	.7	.7	0.0	<15	0.10	<15	0.0	<15
Molybdenum	50	.6	1						
Nickel	40	.5	.5						
Potassium	10000	200	200						
Selenium	10	2	2						
Silver	10	.5	.5						
Sodium	10000	500	500						
Strontium	10	.5	.5						
Thallium	10	1.3	1.3						
Tin	50	.7	1.8						
Titanium	10	.9	1						
Vanadium	50	.5	1						
Zinc	20	3	5						

Associated samples MP26272: FA9328-1, FA9328-3, FA9328-5, FA9328-1F, FA9328-3F, FA9328-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9328
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			11/06/13					11/06/13	
Metal	FA9328-1 Original	DUP	RPD	QC Limits	FA9328-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron	0.00	38.2	200.0(a)	0-20	0.00	24300	26000	93.5	70-130
Lead									
Magnesium									
Manganese	658	673	2.3	0-20	658	1160	500	100.4	70-130
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP26272: FA9328-1, FA9328-3, FA9328-5, FA9328-1F, FA9328-3F, FA9328-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9328
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/06/13

Metal	FA9328-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	0.00	23900	26000	91.9	1.7	20
Lead						
Magnesium						
Manganese	658	1140	500	96.4	1.7	20
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP26272: FA9328-1, FA9328-3, FA9328-5, FA9328-1F, FA9328-3F, FA9328-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA9328
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/06/13

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	26000	26000	100.0	85-115
Lead				
Magnesium				
Manganese	529	500	105.8	85-115
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP26272: FA9328-1, FA9328-3, FA9328-5, FA9328-1F, FA9328-3F, FA9328-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA9328
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/06/13

Metal	FA9328-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	0.00	0.00	NC	0-10
Lead				
Magnesium				
Manganese	658	657	0.1	0-10
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP26272: FA9328-1, FA9328-3, FA9328-5, FA9328-1F, FA9328-3F, FA9328-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA9328
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/06/13

Metal	Sample ml	Final ml	FA9328-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10			2724	0.2	150	3000	90.8	85-115
Lead										
Magnesium										
Manganese	9.8	10	657.5	644.35	685.8	0.2	2.5	50	82.9*(a)	85-115
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP26272: FA9328-1, FA9328-3, FA9328-5, FA9328-1F, FA9328-3F, FA9328-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9328
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP22741/GN58530	2.0	0.0	mg/l	198	168	84.7*(a)	85-115%
Chemical Oxygen Demand	GP22766/GN58480	20	0.0	mg/l	50.0	46.9	93.8	87-122%
Chloride	GP22744/GN58437	2.0	0.0	mg/l	50	50.2	100.4	90-110%
Chloride	GP22745/GN58437	2.0	0.0	mg/l	50	50.3	100.6	90-110%
Fluoride	GP22745/GN58437	0.20	0.0	mg/l	2.5	2.49	99.6	90-110%
Iron, Ferrous	GN58413	0.10	0.0	mg/l	.500	0.51	102.3	82-115%
Nitrogen, Ammonia	GP22816/GN58613	0.10	0.0	mg/l	2.5	2.58	103.2	90-110%
Nitrogen, Ammonia	GP22829/GN58657	0.10	0.0	mg/l	2.5	2.62	104.8	90-110%
Nitrogen, Nitrate	GP22744/GN58437	0.10	0.0	mg/l	2.5	2.56	102.4	90-110%
Nitrogen, Nitrate	GP22745/GN58437	0.10	0.0	mg/l	2.5	2.53	101.2	90-110%
Nitrogen, Nitrite	GP22744/GN58437	0.10	0.0	mg/l	2.5	2.54	101.6	90-110%
Nitrogen, Nitrite	GP22745/GN58437	0.10	0.0	mg/l	2.5	2.54	101.6	90-110%
Nitrogen, Total Kjeldahl	GP22755/GN58493	0.53	0.0	mg/l	2.63	2.79	106.3	90-110%
Solids, Total Dissolved	GN58444	100	0.0	mg/l				
Sulfate	GP22744/GN58437	2.0	0.0	mg/l	50	50.8	101.6	90-110%
Sulfate	GP22745/GN58437	2.0	0.0	mg/l	50	50.5	101.0	90-110%

Associated Samples:
Batch GN58413: FA9328-1, FA9328-3, FA9328-5
Batch GN58444: FA9328-1, FA9328-3, FA9328-5
Batch GN58445: FA9328-1, FA9328-3, FA9328-5
Batch GP22741: FA9328-1, FA9328-3, FA9328-5
Batch GP22744: FA9328-1
Batch GP22745: FA9328-3, FA9328-5
Batch GP22755: FA9328-1, FA9328-3, FA9328-5
Batch GP22766: FA9328-1, FA9328-3, FA9328-5
Batch GP22816: FA9328-1
Batch GP22829: FA9328-3, FA9328-5
(*) Outside of QC limits
(a) Spike recovery outside of acceptable QC criteria.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9328
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP22741/GN58530	FA9328-5	mg/l	4.0 U	0.0	155.6(a)	0-30%
Iron, Ferrous	GN58413	FA9328-1	mg/l	0.053	0.043	20.4	0-31%
Solids, Total Dissolved	GN58444	FA9321-6	mg/l	840	838	0.2	0-5%

Associated Samples:
Batch GN58413: FA9328-1, FA9328-3, FA9328-5
Batch GN58444: FA9328-1, FA9328-3, FA9328-5
Batch GP22741: FA9328-1, FA9328-3, FA9328-5
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9328
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP22766/GN58480	FA9369-1	mg/l	37.0	50.0	76.5	79.0*(a)	87-122%
Chloride	GP22744/GN58437	FA9312-1	mg/l	16.3	50	64.4	96.2	90-110%
Chloride	GP22745/GN58437	FA9329-2	mg/l	9.1	50	57.6	97.0	90-110%
Fluoride	GP22745/GN58437	FA9329-2	mg/l	0.085 B	2.5	2.6	100.6	90-110%
Nitrogen, Ammonia	GP22816/GN58613	FA9328-1	mg/l	0.044	2.5	2.6	102.2	90-110%
Nitrogen, Ammonia	GP22829/GN58657	FA9375-1	mg/l	0.030 U	2.5	2.8	112.0N(a)	90-110%
Nitrogen, Nitrate	GP22744/GN58437	FA9312-1	mg/l	0.050 U	2.5	2.4	96.0	90-110%
Nitrogen, Nitrate	GP22745/GN58437	FA9329-2	mg/l	0.050 U	2.5	2.4	96.0	90-110%
Nitrogen, Nitrite	GP22744/GN58437	FA9312-1	mg/l	0.050 U	2.5	2.5	100.0	90-110%
Nitrogen, Nitrite	GP22745/GN58437	FA9329-2	mg/l	0.050 U	2.5	2.5	100.0	90-110%
Nitrogen, Total Kjeldahl	GP22755/GN58493	FA9288-3	mg/l	1.2	2.63	3.6	88.8N(a)	90-110%
Sulfate	GP22744/GN58437	FA9312-1	mg/l	0.60 U	50	48.7	97.4	90-110%
Sulfate	GP22745/GN58437	FA9329-2	mg/l	2.3	50	51.1	97.6	90-110%

Associated Samples:
Batch GN58445: FA9328-1, FA9328-3, FA9328-5
Batch GP22744: FA9328-1
Batch GP22745: FA9328-3, FA9328-5
Batch GP22755: FA9328-1, FA9328-3, FA9328-5
Batch GP22766: FA9328-1, FA9328-3, FA9328-5
Batch GP22816: FA9328-1
Batch GP22829: FA9328-3, FA9328-5
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9328
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chemical Oxygen Demand	GP22766/GN58480	FA9369-1	mg/l	37.0	50.0	74.1	3.3	26%
Chloride	GP22744/GN58437	FA9312-1	mg/l	16.3	50	64.9	0.8	20%
Chloride	GP22745/GN58437	FA9329-2	mg/l	9.1	50	57.7	0.2	20%
Fluoride	GP22745/GN58437	FA9329-2	mg/l	0.085 B	2.5	2.6	0.0	20%
Nitrogen, Ammonia	GP22816/GN58613	FA9328-1	mg/l	0.044	2.5	2.6	0.0	20%
Nitrogen, Ammonia	GP22829/GN58657	FA9375-1	mg/l	0.030 U	2.5	2.8	0.0	20%
Nitrogen, Nitrate	GP22744/GN58437	FA9312-1	mg/l	0.050 U	2.5	2.4	0.0	20%
Nitrogen, Nitrate	GP22745/GN58437	FA9329-2	mg/l	0.050 U	2.5	2.4	0.0	20%
Nitrogen, Nitrite	GP22744/GN58437	FA9312-1	mg/l	0.050 U	2.5	2.5	0.0	20%
Nitrogen, Nitrite	GP22745/GN58437	FA9329-2	mg/l	0.050 U	2.5	2.5	0.0	20%
Nitrogen, Total Kjeldahl	GP22755/GN58493	FA9288-3	mg/l	1.2	2.63	3.5	0.9	20%
Sulfate	GP22744/GN58437	FA9312-1	mg/l	0.60 U	50	49.3	1.2	20%
Sulfate	GP22745/GN58437	FA9329-2	mg/l	2.3	50	51.8	1.4	20%

Associated Samples:
Batch GN58445: FA9328-1, FA9328-3, FA9328-5
Batch GP22744: FA9328-1
Batch GP22745: FA9328-3, FA9328-5
Batch GP22755: FA9328-1, FA9328-3, FA9328-5
Batch GP22766: FA9328-1, FA9328-3, FA9328-5
Batch GP22816: FA9328-1
Batch GP22829: FA9328-3, FA9328-5
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Southeast ACCUTEST LABORATORIES

12/06/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA9375

Sampling Dates: 10/22/13 - 10/23/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **148**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

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Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

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Accutest LabLink@147195 17:31 06-Dec-2013

Sample Summary

Bhate Environmental

Job No: FA9375

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA9375-1	10/22/13	14:50	DMZB	10/24/13	AQ	Ground Water	SS61-MW26
FA9375-1F	10/22/13	14:50	DMZB	10/24/13	AQ	Groundwater Filtered	SS61-MW26
FA9375-2	10/22/13	00:00	DMZB	10/24/13	AQ	Trip Blank Water	TRIP BLANK
FA9375-3	10/23/13	10:00	DMZB	10/24/13	AQ	Ground Water	SS61-MW25
FA9375-3F	10/23/13	10:00	DMZB	10/24/13	AQ	Groundwater Filtered	SS61-MW25
FA9375-4	10/23/13	00:00	DMZB	10/24/13	AQ	Trip Blank Water	TRIP BLANK
FA9375-5	10/23/13	10:00	DMZB	10/24/13	AQ	Ground Water	SS61-MW25-A
FA9375-5F	10/23/13	10:00	DMZB	10/24/13	AQ	Groundwater Filtered	SS61-MW25-A
FA9375-6	10/23/13	00:00	DMZB	10/24/13	AQ	Trip Blank Water	TRIP BLANK
FA9375-7	10/23/13	12:20	DMZB	10/24/13	AQ	Ground Water	SS61-MW24
FA9375-7F	10/23/13	12:20	DMZB	10/24/13	AQ	Groundwater Filtered	SS61-MW24
FA9375-8	10/23/13	00:00	DMZB	10/24/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA9375

Site: Holloman AFB; SS61 VCM **Report Date** 11/11/2013 1:11:03

4 Samples and 4 Trip Blanks were collected between 10/22/2013 and 10/23/2013 and were received at Accutest SE on 10/24/2013 properly preserved, at 2 Deg. C and intact. These Samples received an Accutest job number of FA9375. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VP767

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9329-6MS, FA9329-6MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acetone, Dichlorodifluoromethane are outside control limits. Blank Spike recoveries are biased high. Analytes are non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, Carbon disulfide, Tetrachloroethylene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, Carbon disulfide, cis-1,3-Dichloropropene are outside control limits. Probable cause is due to matrix interference.

FA9375-1 for Acetone: Associated BS recovery outside control limits.

FA9375-1 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

FA9375-2 for Acetone: Associated BS recovery outside control limits.

FA9375-2 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VP768

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9480-11MS, FA9480-11MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Acetone, Dichlorodifluoromethane are outside control limits. Blank Spike recoveries are biased high. Analytes are non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, Carbon disulfide, Dichlorodifluoromethane are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,2,3-Trichloropropane, 2-Chloroethyl vinyl ether, Carbon disulfide are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for 2-Chloroethyl vinyl ether are outside control limits for sample FA9480-11MSD. Probable cause is due to sample non-homogeneity.

FA9375-5: Sample was treated with an anti-foaming agent.

FA9375-7: Sample was treated with an anti-foaming agent.

FA9375-3 for Acetone: Associated BS recovery outside control limits.

FA9375-3 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

FA9375-3 for Methylene chloride: Suspected laboratory contaminant.

FA9375-4 for Acetone: Associated BS recovery outside control limits.

FA9375-4 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

FA9375-5 for Acetone: Associated BS recovery outside control limits.

FA9375-5 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

FA9375-5 for Methylene chloride: Suspected laboratory contaminant.

FA9375-6 for Acetone: Associated BS recovery outside control limits.

FA9375-6 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VP768

FA9375-7 for Acetone: Associated BS recovery outside control limits.

FA9375-7 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

FA9375-7 for Methylene chloride: Suspected laboratory contaminant.

FA9375-8 for Acetone: Associated BS recovery outside control limits.

FA9375-8 for Dichlorodifluoromethane: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** VP769

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-5MS, FA9375-5MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP49203

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JB51048-3MS, JB51048-3MSD were used as the QC samples indicated.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for Benzidine are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Benzidine are outside control limits for sample OP49203-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) FA9375-3, FA9375-5 have surrogates outside control limits. Probable cause is due to matrix interference.

Matrix: AQ **Batch ID:** OP49235

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JB51050-7MS, JB51050-7MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Di-n-octyl phthalate are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 4,6-Dinitro-o-cresol, bis(2-Chloroethyl)ether are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for Aniline, bis(2-Chloroethyl)ether are outside control limits for sample OP49235-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) FA9375-3, FA9375-5 have surrogates outside control limits. Probable cause is due to matrix interference.

FA9375-3 for Terphenyl-d14: Outside control limits due to matrix interference.

FA9375-5 for 2,4,6-Tribromophenol: Outside control limits due to matrix interference.

FA9375-3 for Di-n-octyl phthalate: Associated BS recovery outside control limits.

FA9375-5 for Di-n-octyl phthalate: Associated BS recovery outside control limits.

FA9375-7 for Di-n-octyl phthalate: Associated BS recovery outside control limits.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD5084

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-1MS, FA9288-1MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** GCD5093

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9506-2MS, FA9506-2MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP49193

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9288-1MS, FA9288-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for TPH (>C22-C36), TPH (C10-C22) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for TPH (C10-C22) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for TPH (C10-C22) are outside control limits for sample OP49193-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) OP49193-MS has surrogates outside control limits. Probable cause is due to matrix interference.

OP49193-MS for o-Terphenyl: Outside control limits.

Matrix: AQ **Batch ID:** OP49233

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9420-1MS, FA9420-1MSD were used as the QC samples indicated.

Sample(s) OP49193-MS has surrogates outside control limits. Probable cause is due to matrix interference.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP26272

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9328-1DUP, FA9328-1MS, FA9328-1MSD, FA9328-1PS, FA9328-1SDL were used as the QC samples for metals.

RPD(s) for Duplicate for Iron are outside control limits for sample MP26272-D1. RPD acceptable due to low duplicate and sample concentrations.

MP26272-PS1 for Manganese: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Matrix: AQ **Batch ID:** MP26296

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA8356-1RDUP, FA8356-1RMS, FA8356-1RMSD, FA8356-1RPS, FA8356-1RSDL were used as the QC samples for metals.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP22758

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9371-12MS, FA9371-12MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA9375-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA9375-3 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA9375-5 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA9375-7 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP22829

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-1MS, FA9375-1MSD were used as the QC samples for Nitrogen, Ammonia.

Matrix Spike Recovery(s) for Nitrogen, Ammonia are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP22754

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-1MS, FA9375-1MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN58448

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-1DUP was used as the QC samples for Iron, Ferrous.

FA9375-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA9375-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA9375-5 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA9375-7 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R32339

FA9375-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R32340

FA9375-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R32341

FA9375-7 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R32365

FA9375-5 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM18 4500/EPA 376.1

Matrix: AQ **Batch ID:** GN58738

The following samples were run outside of holding time for method SM18 4500/EPA 376.1: FA9375-1, FA9375-3, FA9375-5, FA9375-7.

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN58474

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9371-16DUP was used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP22749

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-1DUP was used as the QC samples for BOD, 5 Day.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP22797

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-1MS, FA9375-1MSD were used as the QC samples for Chemical Oxygen Demand.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: November 11, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA9375
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/22/13 thru 10/23/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA9375-1	**SS61-MW26**					
Benzene		47.5	1.0	0.21	ug/l	SW846 8260B
Ethylbenzene		21.7	1.0	0.29	ug/l	SW846 8260B
Isopropylbenzene		41.0	1.0	0.20	ug/l	SW846 8260B
n-Propylbenzene		0.99 J	1.0	0.23	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		8.2	2.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		1.2 J	2.0	0.20	ug/l	SW846 8260B
Toluene		3.2	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene		38.5	2.0	0.30	ug/l	SW846 8260B
o-Xylene		16.8	1.0	0.20	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.402	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		0.149 J	0.23	0.093	mg/l	SW846 8015C
Iron		268 J	300	29	ug/l	EPA 200.7
Manganese		56.5	15	0.70	ug/l	EPA 200.7
Chemical Oxygen Demand		14.9 J	20	5.3	mg/l	SM19 5220C
Iron, Ferric [a]		0.23 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.039 J	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		1.0	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		2570	500	50	mg/l	SM19 2540C
Sulfate		2810	100	30	mg/l	EPA 300/SW846 9056A
FA9375-1F	**SS61-MW26**					
Manganese		48.5	15	0.70	ug/l	EPA 200.7
FA9375-2	**TRIP BLANK**					
Toluene		0.24 J	1.0	0.20	ug/l	SW846 8260B
FA9375-3	**SS61-MW25**					
Benzene		117	5.0	1.1	ug/l	SW846 8260B
sec-Butylbenzene		1.1 J	5.0	1.1	ug/l	SW846 8260B
tert-Butylbenzene		4.6 J	5.0	1.5	ug/l	SW846 8260B
Chlorobenzene		15.8	5.0	1.0	ug/l	SW846 8260B
m-Dichlorobenzene		74.4	5.0	1.3	ug/l	SW846 8260B
o-Dichlorobenzene		269	5.0	1.1	ug/l	SW846 8260B
p-Dichlorobenzene		104	5.0	1.0	ug/l	SW846 8260B
Isopropylbenzene		46.9	5.0	1.0	ug/l	SW846 8260B
Methylene chloride [c]		18.7 J	25	10	ug/l	SW846 8260B
n-Propylbenzene		1.2 J	5.0	1.1	ug/l	SW846 8260B
2,4-Dichlorophenol		1.8 J	4.7	0.66	ug/l	SW846 8270D
1,2-Dichlorobenzene		149	19	2.5	ug/l	SW846 8270D
1,3-Dichlorobenzene		51.5	4.7	0.72	ug/l	SW846 8270D

Summary of Hits

Job Number: FA9375
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/22/13 thru 10/23/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,4-Dichlorobenzene		71.9	4.7	0.65	ug/l	SW846 8270D
Dibenzofuran		3.0 J	4.7	0.70	ug/l	SW846 8270D
1-Methylnaphthalene		0.72 J	4.7	0.66	ug/l	SW846 8270D
Naphthalene		0.73 J	4.7	0.59	ug/l	SW846 8270D
TPH-GRO (C6-C10)		1.73	0.50	0.25	mg/l	SW846 8015C
TPH (C10-C22)		2.42	1.2	0.47	mg/l	SW846 8015C
TPH (> C22-C36)		0.513 J	1.2	0.47	mg/l	SW846 8015C
Iron		1160	300	29	ug/l	EPA 200.7
Manganese		665	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		30.3	13	13	mg/l	SM19 5210B
Chemical Oxygen Demand		49.7	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide [d]		12.5	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [a]		0.16 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		1.0	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		1.2	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5600	500	50	mg/l	SM19 2540C
Sulfate		3420	100	30	mg/l	EPA 300/SW846 9056A
FA9375-3F	**SS61-MW25**					
Manganese		635	15	0.70	ug/l	EPA 200.7
FA9375-4	**TRIP BLANK**					
Toluene		0.29 J	1.0	0.20	ug/l	SW846 8260B
FA9375-5	**SS61-MW25-A**					
Benzene		882	10	2.1	ug/l	SW846 8260B
Bromobenzene [e]		0.98 J	2.0	0.44	ug/l	SW846 8260B
sec-Butylbenzene [e]		2.3	2.0	0.42	ug/l	SW846 8260B
tert-Butylbenzene [e]		6.9	2.0	0.59	ug/l	SW846 8260B
Chlorobenzene [e]		17.6	2.0	0.40	ug/l	SW846 8260B
1,1-Dichloroethane [e]		2.2	2.0	0.43	ug/l	SW846 8260B
m-Dichlorobenzene [e]		86.3	2.0	0.51	ug/l	SW846 8260B
o-Dichlorobenzene		283	10	2.2	ug/l	SW846 8260B
p-Dichlorobenzene [e]		113	2.0	0.40	ug/l	SW846 8260B
Ethylbenzene [e]		2.5	2.0	0.58	ug/l	SW846 8260B
Isopropylbenzene [e]		161	2.0	0.40	ug/l	SW846 8260B
Methylene chloride [f]		7.9 J	10	4.0	ug/l	SW846 8260B
n-Propylbenzene [e]		4.1	2.0	0.45	ug/l	SW846 8260B
Toluene [e]		0.86 J	2.0	0.40	ug/l	SW846 8260B
2,4-Dichlorophenol		1.9 J	4.7	0.66	ug/l	SW846 8270D
2-Methylphenol		1.2 J	4.7	0.67	ug/l	SW846 8270D
4-Chloroaniline		0.65 J	4.7	0.64	ug/l	SW846 8270D

Summary of Hits

Job Number: FA9375
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/22/13 thru 10/23/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,2-Dichlorobenzene		173	19	2.5	ug/l	SW846 8270D
1,3-Dichlorobenzene		49.4	4.7	0.72	ug/l	SW846 8270D
1,4-Dichlorobenzene		67.8	4.7	0.65	ug/l	SW846 8270D
Dibenzofuran		2.7 J	4.7	0.70	ug/l	SW846 8270D
1-Methylnaphthalene		0.81 J	4.7	0.66	ug/l	SW846 8270D
Naphthalene		0.80 J	4.7	0.59	ug/l	SW846 8270D
TPH-GRO (C6-C10)		2.13	1.0	0.50	mg/l	SW846 8015C
TPH (C10-C22)		2.84	1.2	0.47	mg/l	SW846 8015C
TPH (> C22-C36)		0.539 J	1.2	0.47	mg/l	SW846 8015C
Iron		1120	300	29	ug/l	EPA 200.7
Manganese		635	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		26.0	20	20	mg/l	SM19 5210B
Chemical Oxygen Demand		64.6	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide [d]		12.0	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [a]		0.12 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		1.0	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		1.1	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		6270	500	50	mg/l	SM19 2540C
Sulfate		3470	100	30	mg/l	EPA 300/SW846 9056A
FA9375-5F	**SS61-MW25-A**					
Manganese		648	15	0.70	ug/l	EPA 200.7
FA9375-6	**TRIP BLANK**					
No hits reported in this sample.						
FA9375-7	**SS61-MW24**					
Benzene [e]		6.1	5.0	1.1	ug/l	SW846 8260B
sec-Butylbenzene [e]		4.3 J	5.0	1.1	ug/l	SW846 8260B
tert-Butylbenzene [e]		3.9 J	5.0	1.5	ug/l	SW846 8260B
o-Dichlorobenzene [e]		1.8 J	5.0	1.1	ug/l	SW846 8260B
Ethylbenzene [e]		181	5.0	1.5	ug/l	SW846 8260B
Isopropylbenzene		251	10	2.0	ug/l	SW846 8260B
Methylene chloride [f]		20.7 J	25	10	ug/l	SW846 8260B
n-Propylbenzene [e]		26.0	5.0	1.1	ug/l	SW846 8260B
1,2,4-Trimethylbenzene [e]		71.0	10	1.0	ug/l	SW846 8260B
1,3,5-Trimethylbenzene [e]		1.6 J	10	1.0	ug/l	SW846 8260B
Toluene [e]		2.7 J	5.0	1.0	ug/l	SW846 8260B
m,p-Xylene [e]		96.1	10	1.5	ug/l	SW846 8260B
o-Xylene [e]		25.4	5.0	1.0	ug/l	SW846 8260B
2,4-Dimethylphenol		8.8	4.7	0.72	ug/l	SW846 8270D
Naphthalene		1.0 J	4.7	0.59	ug/l	SW846 8270D

Summary of Hits

Job Number: FA9375
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/22/13 thru 10/23/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TPH-GRO (C6-C10)		1.98	0.50	0.25	mg/l	SW846 8015C
TPH (C10-C22)		2.65	0.93	0.37	mg/l	SW846 8015C
Iron		401	300	29	ug/l	EPA 200.7
Manganese		625	15	0.70	ug/l	EPA 200.7
BOD, 5 Day		13.9	7.0	7.0	mg/l	SM19 5210B
Chemical Oxygen Demand		44.7	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide [d]		4.1	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [a]		0.22 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [b]		0.18	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		1.2	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		7040	500	50	mg/l	SM19 2540C
Sulfate		3940	100	30	mg/l	EPA 300/SW846 9056A
FA9375-7F	**SS61-MW24**					
Manganese		615	15	0.70	ug/l	EPA 200.7
FA9375-8	**TRIP BLANK**					
Toluene		0.27 J	1.0	0.20	ug/l	SW846 8260B

(a) Calculated as: (Iron) - (Iron, Ferrous)
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Suspected laboratory contaminant.
(d) Sample analyzed beyond hold time.
(e) Sample was treated with an anti-foaming agent.
(f) Sample was treated with an anti-foaming agent. Suspected laboratory contaminant.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P20295.D	1	11/02/13	EG	n/a	n/a	VP767
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	47.5	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	21.7	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	41.0	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.99	1.0	0.23	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	8.2	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.2	2.0	0.20	ug/l	J
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	3.2	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	38.5	2.0	0.30	ug/l	
95-47-6	o-Xylene	16.8	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X031387.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.4	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.67	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.7	0.66	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.4	1.4	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.68	ug/l	
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.64	ug/l	
100-02-7	4-Nitrophenol	ND	24	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	24	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.52	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.85	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.66	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.71	ug/l	
92-87-5	Benzidine	ND	24	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.52	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.54	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.63	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.63	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.67	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.94	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.69	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.65	ug/l	
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.66	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.68	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.82	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.64	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.61	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.73	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.65	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.65	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.76	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.55	ug/l	
132-64-9	Dibenzofuran	ND	4.7	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.7	0.94	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.7	0.94	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.94	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.76	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.55	ug/l	
86-73-7	Fluorene	ND	4.7	0.72	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.65	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.90	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.75	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.70	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	0.66	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	0.65	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.71	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.91	ug/l	
91-20-3	Naphthalene	ND	4.7	0.60	ug/l	
98-95-3	Nitrobenzene	ND	4.7	0.68	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.80	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.94	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.67	ug/l	
129-00-0	Pyrene	ND	4.7	0.64	ug/l	
110-86-1	Pyridine	ND	9.4	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		14-67%
4165-62-2	Phenol-d5	31%		10-50%
118-79-6	2,4,6-Tribromophenol	81%		33-118%
4165-60-0	Nitrobenzene-d5	70%		42-108%
321-60-8	2-Fluorobiphenyl	70%		40-106%
1718-51-0	Terphenyl-d14	79%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124557.D	1	10/25/13	CP	n/a	n/a	GCD5084
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.402	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		70-131%
98-08-8	aaa-Trifluorotoluene	98%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38922.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
Run #2							

	Initial Volume	Final Volume
Run #1	1080 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.149	0.23	0.093	mg/l	J
	TPH (> C22-C36)	ND	0.23	0.093	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	58%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	268 J	300	29	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]
Manganese	56.5	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1	**Date Sampled:**	10/22/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	4.0 U	4.0	4.0	mg/l	1	10/29/13 11:40	AA	SM19 5210B
Chemical Oxygen Demand	14.9 J	20	5.3	mg/l	1	10/30/13 11:10	LE	SM19 5220C
Hydrogen Sulfide [a]	0.50 U	1.0	0.50	mg/l	1	11/07/13 08:20	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.23 J	0.40	0.059	mg/l	1	11/07/13 21:02	LM	SM18 3500FED M
Iron, Ferrous [c]	0.039 J	0.10	0.030	mg/l	1	10/24/13 11:20	KC	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	11/04/13 12:19	VK	EPA 350.1
Nitrogen, Nitrate [d]	1.3 U	2.5	1.3	mg/l	25	10/24/13 12:17	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.0	0.53	0.17	mg/l	1	10/28/13 10:49	MG	EPA 351.2
Solids, Total Dissolved	2570	500	50	mg/l	5	10/25/13 11:05	KC	SM19 2540C
Sulfate	2810	100	30	mg/l	50	10/24/13 17:43	AA	EPA 300/SW846 9056A

(a) Sample analyzed beyond hold time.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW26		
Lab Sample ID:	FA9375-1F	**Date Sampled:**	10/22/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	48.5	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-2	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P20273.D	1	11/02/13	EG	n/a	n/a	VP767
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-2	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.24	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-2	**Date Sampled:**	10/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P20323.D	5	11/04/13	EG	n/a	n/a	VP768
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	130	50	ug/l	
107-02-8	Acrolein	ND	100	35	ug/l	
107-13-1	Acrylonitrile	ND	50	10	ug/l	
71-43-2	Benzene	117	5.0	1.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/l	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/l	
75-25-2	Bromoform	ND	5.0	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.1	5.0	1.1	ug/l	J
98-06-6	tert-Butylbenzene	4.6	5.0	1.5	ug/l	J
108-90-7	Chlorobenzene	15.8	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	5.0	1.3	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	1.1	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	25	6.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	1.2	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	3.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	1.5	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.3	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	1.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	10	2.5	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	74.4	5.0	1.3	ug/l	
95-50-1	o-Dichlorobenzene	269	5.0	1.1	ug/l	
106-46-7	p-Dichlorobenzene	104	5.0	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.1	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.5	ug/l	
110-54-3	Hexane	ND	10	4.4	ug/l	
98-82-8	Isopropylbenzene	46.9	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	25	11	ug/l	
74-83-9	Methyl bromide	ND	10	3.9	ug/l	
74-87-3	Methyl chloride	ND	10	2.5	ug/l	
74-95-3	Methylene bromide	ND	10	1.7	ug/l	
75-09-2	Methylene chloride [b]	18.7	25	10	ug/l	J
78-93-3	Methyl ethyl ketone	ND	25	16	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	25	5.0	ug/l	
103-65-1	n-Propylbenzene	1.2	5.0	1.1	ug/l	J
100-42-5	Styrene	ND	5.0	1.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.2	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	2.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	1.0	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.6	ug/l	
108-88-3	Toluene	ND	5.0	1.0	ug/l	
79-01-6	Trichloroethylene	ND	5.0	1.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	2.2	ug/l	
108-05-4	Vinyl Acetate	ND	50	16	ug/l	
	m,p-Xylene	ND	10	1.5	ug/l	
95-47-6	o-Xylene	ND	5.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Associated BS recovery outside control limits.
(b) Suspected laboratory contaminant.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X031440.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
Run #2	X031474.D	4	11/06/13	FS	10/30/13	OP49235	SX1493

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2	1070 ml	1.0 ml

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.3	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.66	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	1.8	4.7	0.66	ug/l	J
105-67-9	2,4-Dimethylphenol	ND	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.3	1.3	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.67	ug/l	
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.63	ug/l	
100-02-7	4-Nitrophenol	ND	23	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	23	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.51	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.84	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.65	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.70	ug/l	
92-87-5	Benzidine	ND	23	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.53	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.62	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.62	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.93	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.68	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.64	ug/l	
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.67	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	149 [a]	19	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.60	ug/l	
541-73-1	1,3-Dichlorobenzene	51.5	4.7	0.72	ug/l	
106-46-7	1,4-Dichlorobenzene	71.9	4.7	0.65	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.64	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.75	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.54	ug/l	
132-64-9	Dibenzofuran	3.0	4.7	0.70	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	4.7	0.93	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	4.7	0.93	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.93	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.75	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.55	ug/l	
86-73-7	Fluorene	ND	4.7	0.71	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.64	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.89	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.74	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.69	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	0.72	4.7	0.66	ug/l	J
91-57-6	2-Methylnaphthalene	ND	4.7	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.90	ug/l	
91-20-3	Naphthalene	0.73	4.7	0.59	ug/l	J
98-95-3	Nitrobenzene	ND	4.7	0.67	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.79	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.93	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.66	ug/l	
129-00-0	Pyrene	ND	4.7	0.63	ug/l	
110-86-1	Pyridine	ND	9.3	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%	39%	14-67%
4165-62-2	Phenol-d5	33%	27%	10-50%
118-79-6	2,4,6-Tribromophenol	92%	88%	33-118%
4165-60-0	Nitrobenzene-d5	96%	82%	42-108%
321-60-8	2-Fluorobiphenyl	76%	78%	40-106%
1718-51-0	Terphenyl-d14	93%	144% c	39-121%

(a) Result is from Run# 2
(b) Associated BS recovery outside control limits.
(c) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124558.D	5	10/25/13	CP	n/a	n/a	GCD5084
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.73	0.50	0.25	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		70-131%
98-08-8	aaa-Trifluorotoluene	100%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY39004.D	5	11/06/13	SJL	10/30/13	OP49233	GYY1433
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.42	1.2	0.47	mg/l	
	TPH (> C22-C36)	0.513	1.2	0.47	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	107%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	1160	300	29	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]
Manganese	665	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	30.3	13	13	mg/l	1	10/29/13 11:40	AA	SM19 5210B
Chemical Oxygen Demand	49.7	20	5.3	mg/l	1	10/30/13 11:10	LE	SM19 5220C
Hydrogen Sulfide [a]	12.5	1.0	0.50	mg/l	1	11/07/13 08:20	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.16 J	0.40	0.059	mg/l	1	11/07/13 21:07	LM	SM18 3500FED M
Iron, Ferrous [c]	1.0	0.10	0.030	mg/l	1	10/24/13 11:20	KC	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	11/04/13 12:31	VK	EPA 350.1
Nitrogen, Nitrate [d]	2.5 U	5.0	2.5	mg/l	50	10/24/13 13:29	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.2	0.53	0.17	mg/l	1	10/28/13 10:24	MG	EPA 351.2
Solids, Total Dissolved	5600	500	50	mg/l	5	10/25/13 11:05	KC	SM19 2540C
Sulfate	3420	100	30	mg/l	50	10/24/13 13:29	AA	EPA 300/SW846 9056A

(a) Sample analyzed beyond hold time.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25		
Lab Sample ID:	FA9375-3F	**Date Sampled:**	10/23/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	635	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-4	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P20306.D	1	11/04/13	EG	n/a	n/a	VP768
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-4	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.29	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-4	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	108%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	P20324.D	2	11/04/13	EG	n/a	n/a	VP768
Run #2	P20341.D	10	11/05/13	EG	n/a	n/a	VP769

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	50	20	ug/l	
107-02-8	Acrolein	ND	40	14	ug/l	
107-13-1	Acrylonitrile	ND	20	4.0	ug/l	
71-43-2	Benzene	882 [c]	10	2.1	ug/l	
108-86-1	Bromobenzene	0.98	2.0	0.44	ug/l	J
74-97-5	Bromochloromethane	ND	2.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.40	ug/l	
75-25-2	Bromoform	ND	2.0	0.69	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.40	ug/l	
135-98-8	sec-Butylbenzene	2.3	2.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	6.9	2.0	0.59	ug/l	
108-90-7	Chlorobenzene	17.6	2.0	0.40	ug/l	
75-00-3	Chloroethane	ND	4.0	1.0	ug/l	
67-66-3	Chloroform	ND	2.0	0.53	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.43	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.40	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	4.0	0.99	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	2.2	2.0	0.43	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.40	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.60	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.44	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.52	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.54	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.49	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	4.0	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.44	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	86.3	2.0	0.51	ug/l	
95-50-1	o-Dichlorobenzene	283 [c]	10	2.2	ug/l	
106-46-7	p-Dichlorobenzene	113	2.0	0.40	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.46	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.42	ug/l	
100-41-4	Ethylbenzene	2.5	2.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	20	4.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.0	1.0	ug/l	
110-54-3	Hexane	ND	4.0	1.8	ug/l	
98-82-8	Isopropylbenzene	161	2.0	0.40	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.40	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	4.5	ug/l	
74-83-9	Methyl bromide	ND	4.0	1.6	ug/l	
74-87-3	Methyl chloride	ND	4.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	4.0	0.69	ug/l	
75-09-2	Methylene chloride [d]	7.9	10	4.0	ug/l	J
78-93-3	Methyl ethyl ketone	ND	10	6.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.42	ug/l	
91-20-3	Naphthalene	ND	10	2.0	ug/l	
103-65-1	n-Propylbenzene	4.1	2.0	0.45	ug/l	
100-42-5	Styrene	ND	2.0	0.40	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.40	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.48	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	4.0	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	4.0	0.40	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	4.0	0.40	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.64	ug/l	
108-88-3	Toluene	0.86	2.0	0.40	ug/l	J
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-69-4	Trichlorofluoromethane	ND	4.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.88	ug/l	
108-05-4	Vinyl Acetate	ND	20	6.3	ug/l	
	m,p-Xylene	ND	4.0	0.59	ug/l	
95-47-6	o-Xylene	ND	2.0	0.40	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	107%	105%	79-125%
2037-26-5	Toluene-D8	99%	98%	85-112%
460-00-4	4-Bromofluorobenzene	101%	102%	83-118%

(a) Sample was treated with an anti-foaming agent.
(b) Associated BS recovery outside control limits.
(c) Result is from Run# 2
(d) Suspected laboratory contaminant.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X031441.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
Run #2	X031475.D	4	11/06/13	FS	10/30/13	OP49235	SX1493

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2	1070 ml	1.0 ml

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.3	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.66	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	1.9	4.7	0.66	ug/l	J
105-67-9	2,4-Dimethylphenol	ND	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.3	1.3	ug/l	
95-48-7	2-Methylphenol	1.2	4.7	0.67	ug/l	J
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.63	ug/l	
100-02-7	4-Nitrophenol	ND	23	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	23	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.51	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.84	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.65	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.70	ug/l	
92-87-5	Benzidine	ND	23	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.53	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.62	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.62	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.93	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.68	ug/l	
106-47-8	4-Chloroaniline	0.65	4.7	0.64	ug/l	J
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.67	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	173 [a]	19	2.5	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.60	ug/l	
541-73-1	1,3-Dichlorobenzene	49.4	4.7	0.72	ug/l	
106-46-7	1,4-Dichlorobenzene	67.8	4.7	0.65	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.64	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.75	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.54	ug/l	
132-64-9	Dibenzofuran	2.7	4.7	0.70	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	4.7	0.93	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	4.7	0.93	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.93	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.75	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.55	ug/l	
86-73-7	Fluorene	ND	4.7	0.71	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.64	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.89	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.74	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.69	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	0.81	4.7	0.66	ug/l	J
91-57-6	2-Methylnaphthalene	ND	4.7	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.90	ug/l	
91-20-3	Naphthalene	0.80	4.7	0.59	ug/l	J
98-95-3	Nitrobenzene	ND	4.7	0.67	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.79	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.93	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.66	ug/l	
129-00-0	Pyrene	ND	4.7	0.63	ug/l	
110-86-1	Pyridine	ND	9.3	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%	44%	14-67%
4165-62-2	Phenol-d5	31%	30%	10-50%
118-79-6	2,4,6-Tribromophenol	80%	136% [c]	33-118%
4165-60-0	Nitrobenzene-d5	109%	83%	42-108%
321-60-8	2-Fluorobiphenyl	82%	79%	40-106%
1718-51-0	Terphenyl-d14	89%	92%	39-121%

(a) Result is from Run# 2
(b) Associated BS recovery outside control limits.
(c) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124559.D	10	10/25/13	CP	n/a	n/a	GCD5084
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	2.13	1.0	0.50	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	86%		70-131%
98-08-8	aaa-Trifluorotoluene	98%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY39005.D	5	11/06/13	SJL	10/30/13	OP49233	GYY1433
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.84	1.2	0.47	mg/l	
	TPH (> C22-C36)	0.539	1.2	0.47	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	114%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	1120	300	29	ug/l	1	11/08/13	11/08/13	LM	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	635	15	0.70	ug/l	1	11/08/13	11/08/13	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA11191
(2) Prep QC Batch: MP26296

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	26.0	20	20	mg/l	1	10/29/13 11:40	AA	SM19 5210B
Chemical Oxygen Demand	64.6	20	5.3	mg/l	1	10/30/13 11:10	LE	SM19 5220C
Hydrogen Sulfide [a]	12.0	1.0	0.50	mg/l	1	11/07/13 08:20	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.12 J	0.40	0.059	mg/l	1	11/08/13 21:28	LM	SM18 3500FED M
Iron, Ferrous [c]	1.0	0.10	0.030	mg/l	1	10/24/13 11:20	KC	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	11/04/13 12:32	VK	EPA 350.1
Nitrogen, Nitrate [d]	2.5 U	5.0	2.5	mg/l	50	10/24/13 13:44	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.1	0.53	0.17	mg/l	1	10/28/13 10:25	MG	EPA 351.2
Solids, Total Dissolved	6270	500	50	mg/l	5	10/25/13 11:05	KC	SM19 2540C
Sulfate	3470	100	30	mg/l	50	10/24/13 13:44	AA	EPA 300/SW846 9056A

(a) Sample analyzed beyond hold time.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW25-A		
Lab Sample ID:	FA9375-5F	**Date Sampled:**	10/23/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	648	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-6	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P20307.D	1	11/04/13	EG	n/a	n/a	VP768
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-6	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-6	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	P20325.D	5	11/04/13	EG	n/a	n/a	VP768
Run #2	P20342.D	10	11/05/13	EG	n/a	n/a	VP769

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	130	50	ug/l	
107-02-8	Acrolein	ND	100	35	ug/l	
107-13-1	Acrylonitrile	ND	50	10	ug/l	
71-43-2	Benzene	6.1	5.0	1.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/l	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/l	
75-25-2	Bromoform	ND	5.0	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	4.3	5.0	1.1	ug/l	J
98-06-6	tert-Butylbenzene	3.9	5.0	1.5	ug/l	J
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	5.0	1.3	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	1.1	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	25	6.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	1.2	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	3.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	1.5	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.3	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	1.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	10	2.5	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	5.0	1.3	ug/l	
95-50-1	o-Dichlorobenzene	1.8	5.0	1.1	ug/l	J
106-46-7	p-Dichlorobenzene	ND	5.0	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.1	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	181	5.0	1.5	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.5	ug/l	
110-54-3	Hexane	ND	10	4.4	ug/l	
98-82-8	Isopropylbenzene	251 [c]	10	2.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	25	11	ug/l	
74-83-9	Methyl bromide	ND	10	3.9	ug/l	
74-87-3	Methyl chloride	ND	10	2.5	ug/l	
74-95-3	Methylene bromide	ND	10	1.7	ug/l	
75-09-2	Methylene chloride [d]	20.7	25	10	ug/l	J
78-93-3	Methyl ethyl ketone	ND	25	16	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	25	5.0	ug/l	
103-65-1	n-Propylbenzene	26.0	5.0	1.1	ug/l	
100-42-5	Styrene	ND	5.0	1.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.2	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	2.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	71.0	10	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.6	10	1.0	ug/l	J
127-18-4	Tetrachloroethylene	ND	5.0	1.6	ug/l	
108-88-3	Toluene	2.7	5.0	1.0	ug/l	J
79-01-6	Trichloroethylene	ND	5.0	1.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	2.2	ug/l	
108-05-4	Vinyl Acetate	ND	50	16	ug/l	
	m,p-Xylene	96.1	10	1.5	ug/l	
95-47-6	o-Xylene	25.4	5.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	104%	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	105%	79-125%
2037-26-5	Toluene-D8	97%	96%	85-112%
460-00-4	4-Bromofluorobenzene	103%	106%	83-118%

(a) Sample was treated with an anti-foaming agent.
(b) Associated BS recovery outside control limits.
(c) Result is from Run# 2
(d) Suspected laboratory contaminant.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X031442.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.3	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.66	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.7	0.66	ug/l	
105-67-9	2,4-Dimethylphenol	8.8	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.3	1.3	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.67	ug/l	
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.63	ug/l	
100-02-7	4-Nitrophenol	ND	23	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	23	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.51	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.84	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.65	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.70	ug/l	
92-87-5	Benzidine	ND	23	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.53	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.62	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.62	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.93	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.68	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.64	ug/l	
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.67	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.64	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.60	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.72	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.65	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.64	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.75	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.54	ug/l	
132-64-9	Dibenzofuran	ND	4.7	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.7	0.93	ug/l	
117-84-0	Di-n-octyl phthalate [a]	ND	4.7	0.93	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.93	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.75	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.55	ug/l	
86-73-7	Fluorene	ND	4.7	0.71	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.64	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.89	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.74	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.69	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	0.66	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.90	ug/l	
91-20-3	Naphthalene	1.0	4.7	0.59	ug/l	J
98-95-3	Nitrobenzene	ND	4.7	0.67	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.79	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.93	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.66	ug/l	
129-00-0	Pyrene	ND	4.7	0.63	ug/l	
110-86-1	Pyridine	ND	9.3	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		14-67%
4165-62-2	Phenol-d5	34%		10-50%
118-79-6	2,4,6-Tribromophenol	91%		33-118%
4165-60-0	Nitrobenzene-d5	87%		42-108%
321-60-8	2-Fluorobiphenyl	75%		40-106%
1718-51-0	Terphenyl-d14	94%		39-121%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124787.D	5	11/04/13	CP	n/a	n/a	GCD5093
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.98	0.50	0.25	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	112%		70-131%
98-08-8	aaa-Trifluorotoluene	99%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY39006.D	4	11/06/13	SJL	10/30/13	OP49233	GYY1433
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.65	0.93	0.37	mg/l	
	TPH (> C22-C36)	ND	0.93	0.37	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	110%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	401	300	29	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]
Manganese	625	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day	13.9	7.0	7.0	mg/l	1	10/29/13 11:40	AA	SM19 5210B
Chemical Oxygen Demand	44.7	20	5.3	mg/l	1	10/30/13 11:10	LE	SM19 5220C
Hydrogen Sulfide [a]	4.1	1.0	0.50	mg/l	1	11/07/13 08:20	LE	SM18 4500/EPA 376.1
Iron, Ferric [b]	0.22 J	0.40	0.059	mg/l	1	11/07/13 21:12	LM	SM18 3500FED M
Iron, Ferrous [c]	0.18	0.10	0.030	mg/l	1	10/24/13 11:20	KC	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	11/04/13 12:33	VK	EPA 350.1
Nitrogen, Nitrate [d]	2.5 U	5.0	2.5	mg/l	50	10/24/13 14:00	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	1.2	0.53	0.17	mg/l	1	10/28/13 10:26	MG	EPA 351.2
Solids, Total Dissolved	7040	500	50	mg/l	5	10/25/13 11:05	KC	SM19 2540C
Sulfate	3940	100	30	mg/l	50	10/24/13 14:00	AA	EPA 300/SW846 9056A

(a) Sample analyzed beyond hold time.
(b) Calculated as: (Iron) - (Iron, Ferrous)
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW24		
Lab Sample ID:	FA9375-7F	**Date Sampled:**	10/23/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/24/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	615	15	0.70	ug/l	1	11/06/13	11/07/13	LM	EPA 200.7 [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11187
(2) Prep QC Batch: MP26272

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-8	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P20308.D	1	11/04/13	EG	n/a	n/a	VP768
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-8	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.27	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9375-8	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	108%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA9375

Page: 1 of 1
Project No: 9100133
COC Number(1): 10232013-01
LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1	SS61-MW26	SS61-MW26	10/22/13	1450	-	N	1	GW	18	X	X	X	X	X	X	X	X	X	X				1
2	Trip Blank				-	TB	1	WQ	2	X													1
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/23/13	1400	1. [signature]	10-24-13	1000
2. [signature]	10-24-13	1000	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:
Method of Shipment: Fed Ex Airbill Number: 79697787 0433
Analytical Lab: Accutest Labs Delivery Location: Orlando, FL
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) 26, 26, 20, 22
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA9375: Chain of Custody
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bhate ENVIRONMENT INFRASTRUCTURE

FA9375

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Project No: 9100133

COC Number(1): 10232013-02

LIMS Number:

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base

Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)

Client Name: USACE - Omaha District

Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
3	SS61-MW25	SS61-MW25	10/23/13	1000	-	N	1	GW	18	X	X	X	X	X	X	X	X	X	X				2
4	Trip Blank				-	TB	1	WQ	2	X													2
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

Sample Analysis Requested (5)

Quality Assurance Samples (6)

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/23/13	1400	1. FR		
2. [signature]	10/24/13	1000	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:

Method of Shipment: Fed Ex Airbill Number: 796977870374

Analytical Lab: Accutest Labs Delivery Location: Orlando, FL

Lab Recipient: Delivery Date/Time:

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

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

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

bhate ENVIRONMENT INFRASTRUCTURE

FA9375

Page: 1 of 1

Project No: 9100133

COC Number(1): 10232013-03

LIMS Number:

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base

Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)

Client Name: USACE - Omaha District

Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (3)	Sample Number (2)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	PE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
5	SS61-MW25-A	SS61-MW25	10/23/13	1000	-	FD	1	WG	18	X	X	X	X	X	X	X	X	X	X				3
6	Trip Blank				-	FB	1	WQ	2	X													3
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/23/13	1400	1. [signature]		
2. [signature]	10-24-13	1000	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:

Shipped No.:

Method of Shipment: Fed Ex

Airbill Number: 7969 7787 0710

Analytical Lab: Accutest Labs

Delivery Location: Orlando, FL

Lab Recipient:

Delivery Date/Time:

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

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

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

bhate ENVIRONMENT INFRASTRUCTURE

FA9375

Page: 1 of 1

Project No: 9100133

COC Number(1): 10 23 2013-04

LIMS Number:

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base

Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)

Client Name: USACE - Omaha District

Collected by: Dustin McNeil / Zack Beck

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)											Quality Assurance Samples (6)			
2/8 SS61-MW24	SS61-MW24	10/23/13	1220	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				4
Trip Blank				-	TB	1	WQ	2	X													4
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

COMMENTS: **Dissolved Mn filtered in the field**

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/23/13	1400	1. [signature]		
2. [signature]	10-24-13	1000	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:

Method of Shipment: Fed Ex Airbill Number: 7969 7787 0823

Analytical Lab: Accutest Labs Delivery Location: Orlando, FL

Lab Recipient: Delivery Date/Time:

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

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

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

FA9375: Chain of Custody
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ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA9375 CLIENT: B-Hate PROJECT: SS-61

DATE/TIME RECEIVED: 10-24-13 1000 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: 4

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7969 7787 0483

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [x] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.2 2.2 1.6 1.8
- [ ] CORRECTED TEMPS: 2.6 2.6 2.0 2.2

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 10-24-13 REVIEWER SIGNATURE/DATE 10/24/13

NF 12/10

receipt confirmation 122910.xls

5.1

5

FA9375: Chain of Custody

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Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP767-MB	P20272.D	1	11/02/13	EG	n/a	n/a	VP767

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-1, FA9375-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP767-MB	P20272.D	1	11/02/13	EG	n/a	n/a	VP767

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-1, FA9375-2

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP767-MB	P20272.D	1	11/02/13	EG	n/a	n/a	VP767

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-1, FA9375-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	105%	83-118%

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-MB	P20303.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-3, FA9375-4, FA9375-5, FA9375-6, FA9375-7, FA9375-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-MB	P20303.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-3, FA9375-4, FA9375-5, FA9375-6, FA9375-7, FA9375-8

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-MB	P20303.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-3, FA9375-4, FA9375-5, FA9375-6, FA9375-7, FA9375-8

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	83-118%
17060-07-0	1,2-Dichloroethane-D4	113%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP769-MB	P20334.D	1	11/05/13	EG	n/a	n/a	VP769

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-5, FA9375-7

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.21	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP767-BS	P20271.D	1	11/02/13	EG	n/a	n/a	VP767

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-1, FA9375-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	221	177*	50-147
107-02-8	Acrolein	125	111	89	31-154
107-13-1	Acrylonitrile	125	121	97	58-126
71-43-2	Benzene	25	26.7	107	81-122
108-86-1	Bromobenzene	25	26.5	106	80-121
74-97-5	Bromochloromethane	25	23.2	93	76-123
75-27-4	Bromodichloromethane	25	27.4	110	79-123
75-25-2	Bromoform	25	24.2	97	66-123
104-51-8	n-Butylbenzene	25	26.1	104	79-126
135-98-8	sec-Butylbenzene	25	29.7	119	83-133
98-06-6	tert-Butylbenzene	25	27.8	111	80-133
108-90-7	Chlorobenzene	25	26.8	107	82-124
75-00-3	Chloroethane	25	22.8	91	62-144
67-66-3	Chloroform	25	26.0	104	80-124
95-49-8	o-Chlorotoluene	25	28.2	113	81-127
106-43-4	p-Chlorotoluene	25	28.8	115	83-130
110-75-8	2-Chloroethyl vinyl ether	125	100	80	56-122
75-15-0	Carbon disulfide	25	19.2	77	66-148
56-23-5	Carbon tetrachloride	25	26.0	104	76-136
75-34-3	1,1-Dichloroethane	25	25.9	104	81-122
75-35-4	1,1-Dichloroethylene	25	28.1	112	78-137
563-58-6	1,1-Dichloropropene	25	30.5	122	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	28.8	115	64-123
106-93-4	1,2-Dibromoethane	25	25.8	103	75-120
107-06-2	1,2-Dichloroethane	25	26.6	106	75-125
78-87-5	1,2-Dichloropropane	25	26.0	104	76-124
142-28-9	1,3-Dichloropropane	25	26.1	104	80-118
594-20-7	2,2-Dichloropropane	25	22.1	88	74-139
124-48-1	Dibromochloromethane	25	25.7	103	78-122
75-71-8	Dichlorodifluoromethane	25	42.4	170*	42-167
156-59-2	cis-1,2-Dichloroethylene	25	24.8	99	78-120
10061-01-5	cis-1,3-Dichloropropene	25	24.8	99	75-118
541-73-1	m-Dichlorobenzene	25	28.6	114	84-125
95-50-1	o-Dichlorobenzene	25	26.5	106	82-124
106-46-7	p-Dichlorobenzene	25	26.5	106	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.3	109	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP767-BS	P20271.D	1	11/02/13	EG	n/a	n/a	VP767

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-1, FA9375-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	27.3	109	80-120
100-41-4	Ethylbenzene	25	26.5	106	81-121
591-78-6	2-Hexanone	125	145	116	61-129
87-68-3	Hexachlorobutadiene	25	26.9	108	75-142
110-54-3	Hexane	25	26.5	106	69-132
98-82-8	Isopropylbenzene	25	26.9	108	83-132
99-87-6	p-Isopropyltoluene	25	28.2	113	79-130
108-10-1	4-Methyl-2-pentanone	125	137	110	66-122
74-83-9	Methyl bromide	25	23.1	92	59-143
74-87-3	Methyl chloride	25	32.6	130	50-159
74-95-3	Methylene bromide	25	26.6	106	78-119
75-09-2	Methylene chloride	25	25.5	102	69-135
78-93-3	Methyl ethyl ketone	125	156	125	56-143
1634-04-4	Methyl Tert Butyl Ether	25	23.0	92	72-117
91-20-3	Naphthalene	25	25.3	101	63-132
103-65-1	n-Propylbenzene	25	29.4	118	82-133
100-42-5	Styrene	25	25.5	102	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	26.7	107	77-122
71-55-6	1,1,1-Trichloroethane	25	25.0	100	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	27.3	109	72-120
79-00-5	1,1,2-Trichloroethane	25	26.4	106	76-119
87-61-6	1,2,3-Trichlorobenzene	25	25.3	101	68-131
96-18-4	1,2,3-Trichloropropane	25	28.6	114	77-120
120-82-1	1,2,4-Trichlorobenzene	25	23.3	93	73-129
95-63-6	1,2,4-Trimethylbenzene	25	25.9	104	79-120
108-67-8	1,3,5-Trimethylbenzene	25	26.9	108	79-120
127-18-4	Tetrachloroethylene	25	27.2	109	76-135
108-88-3	Toluene	25	26.7	107	80-120
79-01-6	Trichloroethylene	25	27.7	111	81-126
75-69-4	Trichlorofluoromethane	25	23.7	95	71-156
75-01-4	Vinyl chloride	25	28.7	115	69-159
108-05-4	Vinyl Acetate	125	121	97	43-154
	m,p-Xylene	50	56.1	112	79-126
95-47-6	o-Xylene	25	27.7	111	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP767-BS	P20271.D	1	11/02/13	EG	n/a	n/a	VP767

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-1, FA9375-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-BS	P20302.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-3, FA9375-4, FA9375-5, FA9375-6, FA9375-7, FA9375-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	222	178*	50-147
107-02-8	Acrolein	125	106	85	31-154
107-13-1	Acrylonitrile	125	120	96	58-126
71-43-2	Benzene	25	26.7	107	81-122
108-86-1	Bromobenzene	25	24.6	98	80-121
74-97-5	Bromochloromethane	25	23.8	95	76-123
75-27-4	Bromodichloromethane	25	27.6	110	79-123
75-25-2	Bromoform	25	24.7	99	66-123
104-51-8	n-Butylbenzene	25	24.5	98	79-126
135-98-8	sec-Butylbenzene	25	28.8	115	83-133
98-06-6	tert-Butylbenzene	25	26.4	106	80-133
108-90-7	Chlorobenzene	25	27.4	110	82-124
75-00-3	Chloroethane	25	23.9	96	62-144
67-66-3	Chloroform	25	26.6	106	80-124
95-49-8	o-Chlorotoluene	25	27.1	108	81-127
106-43-4	p-Chlorotoluene	25	27.5	110	83-130
110-75-8	2-Chloroethyl vinyl ether	125	139	111	56-122
75-15-0	Carbon disulfide	25	19.6	78	66-148
56-23-5	Carbon tetrachloride	25	27.0	108	76-136
75-34-3	1,1-Dichloroethane	25	26.2	105	81-122
75-35-4	1,1-Dichloroethylene	25	28.3	113	78-137
563-58-6	1,1-Dichloropropene	25	29.3	117	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	25.7	103	64-123
106-93-4	1,2-Dibromoethane	25	26.9	108	75-120
107-06-2	1,2-Dichloroethane	25	27.5	110	75-125
78-87-5	1,2-Dichloropropane	25	24.8	99	76-124
142-28-9	1,3-Dichloropropane	25	26.8	107	80-118
594-20-7	2,2-Dichloropropane	25	22.2	89	74-139
124-48-1	Dibromochloromethane	25	25.9	104	78-122
75-71-8	Dichlorodifluoromethane	25	43.0	172*	42-167
156-59-2	cis-1,2-Dichloroethylene	25	25.1	100	78-120
10061-01-5	cis-1,3-Dichloropropene	25	25.4	102	75-118
541-73-1	m-Dichlorobenzene	25	26.6	106	84-125
95-50-1	o-Dichlorobenzene	25	25.5	102	82-124
106-46-7	p-Dichlorobenzene	25	25.2	101	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.6	106	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-BS	P20302.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-3, FA9375-4, FA9375-5, FA9375-6, FA9375-7, FA9375-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	28.3	113	80-120
100-41-4	Ethylbenzene	25	26.3	105	81-121
591-78-6	2-Hexanone	125	151	121	61-129
87-68-3	Hexachlorobutadiene	25	25.2	101	75-142
110-54-3	Hexane	25	25.9	104	69-132
98-82-8	Isopropylbenzene	25	26.4	106	83-132
99-87-6	p-Isopropyltoluene	25	27.3	109	79-130
108-10-1	4-Methyl-2-pentanone	125	138	110	66-122
74-83-9	Methyl bromide	25	23.9	96	59-143
74-87-3	Methyl chloride	25	30.6	122	50-159
74-95-3	Methylene bromide	25	26.6	106	78-119
75-09-2	Methylene chloride	25	24.9	100	69-135
78-93-3	Methyl ethyl ketone	125	164	131	56-143
1634-04-4	Methyl Tert Butyl Ether	25	22.5	90	72-117
91-20-3	Naphthalene	25	23.4	94	63-132
103-65-1	n-Propylbenzene	25	28.2	113	82-133
100-42-5	Styrene	25	25.5	102	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	26.5	106	77-122
71-55-6	1,1,1-Trichloroethane	25	25.6	102	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	26.6	106	72-120
79-00-5	1,1,2-Trichloroethane	25	28.6	114	76-119
87-61-6	1,2,3-Trichlorobenzene	25	24.1	96	68-131
96-18-4	1,2,3-Trichloropropane	25	25.3	101	77-120
120-82-1	1,2,4-Trichlorobenzene	25	21.8	87	73-129
95-63-6	1,2,4-Trimethylbenzene	25	24.8	99	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.4	102	79-120
127-18-4	Tetrachloroethylene	25	27.8	111	76-135
108-88-3	Toluene	25	26.6	106	80-120
79-01-6	Trichloroethylene	25	27.2	109	81-126
75-69-4	Trichlorofluoromethane	25	24.5	98	71-156
75-01-4	Vinyl chloride	25	29.3	117	69-159
108-05-4	Vinyl Acetate	125	123	98	43-154
	m,p-Xylene	50	55.2	110	79-126
95-47-6	o-Xylene	25	26.9	108	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP768-BS	P20302.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-3, FA9375-4, FA9375-5, FA9375-6, FA9375-7, FA9375-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	97%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP769-BS	P20333.D	1	11/05/13	EG	n/a	n/a	VP769

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-5, FA9375-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	26.7	107	81-122
95-50-1	o-Dichlorobenzene	25	25.0	100	82-124
98-82-8	Isopropylbenzene	25	26.7	107	83-132

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	96%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9329-6MS	P20284.D	1	11/02/13	EG	n/a	n/a	VP767
FA9329-6MSD	P20285.D	1	11/02/13	EG	n/a	n/a	VP767
FA9329-6	P20283.D	1	11/02/13	EG	n/a	n/a	VP767
FA9329-6	P20277.D	2	11/02/13	EG	n/a	n/a	VP767

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-1, FA9375-2

CAS No.	Compound	FA9329-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	130	104	141	113	8	50-147/21
107-02-8	Acrolein	ND		125	88.2	71	71.7	57	21	31-154/29
107-13-1	Acrylonitrile	ND		125	112	90	106	85	6	58-126/16
71-43-2	Benzene	ND		25	27.3	109	25.9	104	5	81-122/14
108-86-1	Bromobenzene	ND		25	25.6	102	24.8	99	3	80-121/14
74-97-5	Bromochloromethane	ND		25	24.2	97	23.3	93	4	76-123/14
75-27-4	Bromodichloromethane	ND		25	26.3	105	23.2	93	13	79-123/19
75-25-2	Bromoform	ND		25	18.9	76	17.5	70	8	66-123/21
104-51-8	n-Butylbenzene	ND		25	24.4	98	23.0	92	6	79-126/16
135-98-8	sec-Butylbenzene	ND		25	28.9	116	27.7	111	4	83-133/16
98-06-6	tert-Butylbenzene	ND		25	26.6	106	26.3	105	1	80-133/16
108-90-7	Chlorobenzene	ND		25	26.7	107	26.2	105	2	82-124/14
75-00-3	Chloroethane	ND		25	23.7	95	23.7	95	0	62-144/20
67-66-3	Chloroform	3.2		25	29.5	105	27.7	98	6	80-124/15
95-49-8	o-Chlorotoluene	ND		25	27.3	109	26.5	106	3	81-127/15
106-43-4	p-Chlorotoluene	ND		25	27.9	112	26.9	108	4	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		125	ND	0*	ND	0*	nc	56-122/23
75-15-0	Carbon disulfide	ND		25	14.4	58*	13.2	53*	9	66-148/23
56-23-5	Carbon tetrachloride	ND		25	25.6	102	21.7	87	16	76-136/23
75-34-3	1,1-Dichloroethane	1.5		25	27.0	102	25.9	98	4	81-122/15
75-35-4	1,1-Dichloroethylene	ND		25	28.7	115	28.2	113	2	78-137/18
563-58-6	1,1-Dichloropropene	ND		25	29.5	118	27.6	110	7	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	25.0	100	23.5	94	6	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	25.1	100	26.2	105	4	75-120/13
107-06-2	1,2-Dichloroethane	ND		25	26.7	107	25.9	104	3	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	24.6	98	24.0	96	2	76-124/14
142-28-9	1,3-Dichloropropane	ND		25	25.1	100	25.0	100	0	80-118/13
594-20-7	2,2-Dichloropropane	ND		25	20.1	80	20.6	82	2	74-139/17
124-48-1	Dibromochloromethane	ND		25	21.8	87	20.0	80	9	78-122/19
75-71-8	Dichlorodifluoromethane	ND		25	39.3	157	38.6	154	2	42-167/19
156-59-2	cis-1,2-Dichloroethylene	45.2		25	68.0	91	65.1	80	4	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	21.9	88	18.6	74*	16	75-118/23
541-73-1	m-Dichlorobenzene	ND		25	27.4	110	26.7	107	3	84-125/14
95-50-1	o-Dichlorobenzene	ND		25	25.9	104	24.8	99	4	82-124/14
106-46-7	p-Dichlorobenzene	ND		25	25.0	100	24.7	99	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	0.28	J	25	26.1	103	24.2	96	8	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9329-6MS	P20284.D	1	11/02/13	EG	n/a	n/a	VP767
FA9329-6MSD	P20285.D	1	11/02/13	EG	n/a	n/a	VP767
FA9329-6	P20283.D	1	11/02/13	EG	n/a	n/a	VP767
FA9329-6	P20277.D	2	11/02/13	EG	n/a	n/a	VP767

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-1, FA9375-2

CAS No.	Compound	FA9329-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		25	24.8	99	21.7	87	13	80-120/22
100-41-4	Ethylbenzene	ND		25	25.3	101	25.3	101	0	81-121/14
591-78-6	2-Hexanone	ND		125	125	100	128	102	2	61-129/18
87-68-3	Hexachlorobutadiene	ND		25	23.0	92	24.6	98	7	75-142/19
110-54-3	Hexane	ND		25	23.7	95	24.1	96	2	69-132/20
98-82-8	Isopropylbenzene	ND		25	26.1	104	25.2	101	4	83-132/15
99-87-6	p-Isopropyltoluene	ND		25	27.8	111	26.3	105	6	79-130/16
108-10-1	4-Methyl-2-pentanone	ND		125	130	104	135	108	4	66-122/16
74-83-9	Methyl bromide	ND		25	23.5	94	23.0	92	2	59-143/19
74-87-3	Methyl chloride	ND		25	28.2	113	28.5	114	1	50-159/19
74-95-3	Methylene bromide	ND		25	26.5	106	25.6	102	3	78-119/14
75-09-2	Methylene chloride	ND		25	24.7	99	23.9	96	3	69-135/16
78-93-3	Methyl ethyl ketone	ND		125	127	102	135	108	6	56-143/18
1634-04-4	Methyl Tert Butyl Ether	ND		25	21.8	87	22.6	90	4	72-117/14
91-20-3	Naphthalene	ND		25	21.8	87	24.3	97	11	63-132/25
103-65-1	n-Propylbenzene	ND		25	28.5	114	27.0	108	5	82-133/15
100-42-5	Styrene	ND		25	24.3	97	22.5	90	8	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		25	25.6	102	23.3	93	9	77-122/19
71-55-6	1,1,1-Trichloroethane	ND		25	25.1	100	24.7	99	2	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	25.1	100	25.6	102	2	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		25	25.6	102	24.6	98	4	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	21.9	88	23.9	96	9	68-131/25
96-18-4	1,2,3-Trichloropropane	ND		25	26.4	106	27.0	108	2	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND		25	20.2	81	22.1	88	9	73-129/20
95-63-6	1,2,4-Trimethylbenzene	ND		25	25.2	101	23.9	96	5	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		25	25.5	102	24.8	99	3	79-120/19
127-18-4	Tetrachloroethylene	99.6 [b]		25	172	290* [a]	168	274* [a]	2	76-135/16
108-88-3	Toluene	ND		25	25.8	103	25.2	101	2	80-120/14
79-01-6	Trichloroethylene	26.7		25	53.7	108	51.4	99	4	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	22.1	88	21.5	86	3	71-156/21
75-01-4	Vinyl chloride	ND		25	27.8	111	27.8	111	0	69-159/18
108-05-4	Vinyl Acetate	ND		125	114	91	115	92	1	43-154/14
	m,p-Xylene	ND		50	54.6	109	52.4	105	4	79-126/15
95-47-6	o-Xylene	ND		25	26.6	106	25.7	103	3	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9329-6MS	P20284.D	1	11/02/13	EG	n/a	n/a	VP767
FA9329-6MSD	P20285.D	1	11/02/13	EG	n/a	n/a	VP767
FA9329-6	P20283.D	1	11/02/13	EG	n/a	n/a	VP767
FA9329-6	P20277.D	2	11/02/13	EG	n/a	n/a	VP767

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-1, FA9375-2

CAS No.	Surrogate Recoveries	MS	MSD	FA9329-6	FA9329-6	Limits
1868-53-7	Dibromofluoromethane	100%	99%	104%	105%	83-118%
17060-07-0	1,2-Dichloroethane-D4	107%	105%	105%	108%	79-125%
2037-26-5	Toluene-D8	95%	96%	98%	99%	85-112%
460-00-4	4-Bromofluorobenzene	96%	99%	102%	101%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9480-11MS	P20313.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11MSD	P20314.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11	P20311.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-3, FA9375-4, FA9375-5, FA9375-6, FA9375-7, FA9375-8

CAS No.	Compound	FA9480-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U		125	139	111	152	122	9	50-147/21
107-02-8	Acrolein	20 U		125	89.2	71	79.4	64	12	31-154/29
107-13-1	Acrylonitrile	10 U		125	110	88	116	93	5	58-126/16
71-43-2	Benzene	1.0 U		25	28.3	113	27.7	111	2	81-122/14
108-86-1	Bromobenzene	1.0 U		25	26.0	104	26.5	106	2	80-121/14
74-97-5	Bromochloromethane	1.0 U		25	26.2	105	24.5	98	7	76-123/14
75-27-4	Bromodichloromethane	1.0 U		25	29.0	116	24.8	99	16	79-123/19
75-25-2	Bromoform	1.0 U		25	22.9	92	21.0	84	9	66-123/21
104-51-8	n-Butylbenzene	1.0 U		25	26.3	105	25.8	103	2	79-126/16
135-98-8	sec-Butylbenzene	1.0 U		25	30.7	123	29.2	117	5	83-133/16
98-06-6	tert-Butylbenzene	1.0 U		25	29.3	117	27.7	111	6	80-133/16
108-90-7	Chlorobenzene	1.0 U		25	27.8	111	26.8	107	4	82-124/14
75-00-3	Chloroethane	2.0 U		25	24.8	99	24.9	100	0	62-144/20
67-66-3	Chloroform	0.30	J	25	28.3	112	27.2	108	4	80-124/15
95-49-8	o-Chlorotoluene	1.0 U		25	29.4	118	28.7	115	2	81-127/15
106-43-4	p-Chlorotoluene	1.0 U		25	29.9	120	29.9	120	0	83-130/15
110-75-8	2-Chloroethyl vinyl ether	5.0 U		125	6.9	6*	ND	0*	200*	56-122/23
75-15-0	Carbon disulfide	2.0 U		25	16.1	64*	14.4	58*	11	66-148/23
56-23-5	Carbon tetrachloride	1.0 U		25	28.7	115	23.9	96	18	76-136/23
75-34-3	1,1-Dichloroethane	1.0 U		25	28.2	113	26.9	108	5	81-122/15
75-35-4	1,1-Dichloroethylene	1.0 U		25	29.0	116	29.0	116	0	78-137/18
563-58-6	1,1-Dichloropropene	1.0 U		25	31.2	125	30.2	121	3	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U		25	27.0	108	25.2	101	7	64-123/18
106-93-4	1,2-Dibromoethane	1.0 U		25	27.1	108	26.5	106	2	75-120/13
107-06-2	1,2-Dichloroethane	1.0 U		25	28.7	115	28.8	115	0	75-125/14
78-87-5	1,2-Dichloropropane	1.0 U		25	26.5	106	26.7	107	1	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U		25	27.5	110	27.0	108	2	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U		25	23.3	93	23.2	93	0	74-139/17
124-48-1	Dibromochloromethane	1.0 U		25	25.5	102	22.4	90	13	78-122/19
75-71-8	Dichlorodifluoromethane	2.0 U		25	43.0	172*	38.9	156	10	42-167/19
156-59-2	cis-1,2-Dichloroethylene	1.0 U		25	26.6	106	25.3	101	5	78-120/15
10061-01-5	cis-1,3-Dichloropropene	1.0 U		25	25.1	100	21.2	85	17	75-118/23
541-73-1	m-Dichlorobenzene	1.0 U		25	29.8	119	28.4	114	5	84-125/14
95-50-1	o-Dichlorobenzene	1.0 U		25	27.7	111	26.6	106	4	82-124/14
106-46-7	p-Dichlorobenzene	1.0 U		25	27.7	111	26.3	105	5	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U		25	29.0	116	27.4	110	6	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9480-11MS	P20313.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11MSD	P20314.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11	P20311.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-3, FA9375-4, FA9375-5, FA9375-6, FA9375-7, FA9375-8

CAS No.	Compound	FA9480-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	1.0 U		25	27.8	111	24.3	97	13	80-120/22
100-41-4	Ethylbenzene	1.0 U		25	27.8	111	26.9	108	3	81-121/14
591-78-6	2-Hexanone	10 U		125	131	105	136	109	4	61-129/18
87-68-3	Hexachlorobutadiene	2.0 U		25	26.5	106	27.4	110	3	75-142/19
110-54-3	Hexane	2.0 U		25	27.4	110	26.4	106	4	69-132/20
98-82-8	Isopropylbenzene	1.0 U		25	28.1	112	27.2	109	3	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U		25	29.3	117	28.8	115	2	79-130/16
108-10-1	4-Methyl-2-pentanone	5.0 U		125	136	109	143	114	5	66-122/16
74-83-9	Methyl bromide	2.0 U		25	25.6	102	24.7	99	4	59-143/19
74-87-3	Methyl chloride	2.0 U		25	28.5	114	29.4	118	3	50-159/19
74-95-3	Methylene bromide	2.0 U		25	28.5	114	28.7	115	1	78-119/14
75-09-2	Methylene chloride	5.0 U		25	27.0	108	26.1	104	3	69-135/16
78-93-3	Methyl ethyl ketone	5.0 U		125	139	111	142	114	2	56-143/18
1634-04-4	Methyl Tert Butyl Ether	1.0 U		25	24.6	98	24.6	98	0	72-117/14
91-20-3	Naphthalene	5.0 U		25	23.7	95	26.2	105	10	63-132/25
103-65-1	n-Propylbenzene	1.0 U		25	30.6	122	29.2	117	5	82-133/15
100-42-5	Styrene	1.0 U		25	27.2	109	26.0	104	5	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U		25	27.3	109	24.4	98	11	77-122/19
71-55-6	1,1,1-Trichloroethane	1.0 U		25	26.8	107	26.7	107	0	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U		25	26.9	108	26.9	108	0	72-120/14
79-00-5	1,1,2-Trichloroethane	2.0		25	29.5	110	29.6	110	0	76-119/14
87-61-6	1,2,3-Trichlorobenzene	1.0 U		25	23.9	96	26.3	105	10	68-131/25
96-18-4	1,2,3-Trichloropropane	2.0 U		25	27.7	111	31.0	124*	11	77-120/16
120-82-1	1,2,4-Trichlorobenzene	1.0 U		25	21.7	87	23.5	94	8	73-129/20
95-63-6	1,2,4-Trimethylbenzene	2.0 U		25	27.5	110	26.1	104	5	79-120/18
108-67-8	1,3,5-Trimethylbenzene	2.0 U		25	27.7	111	26.8	107	3	79-120/19
127-18-4	Tetrachloroethylene	1.0 U		25	27.1	108	25.3	101	7	76-135/16
108-88-3	Toluene	1.0 U		25	27.7	111	27.1	108	2	80-120/14
79-01-6	Trichloroethylene	93.5		25	121	110	120	106	1	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U		25	24.9	100	23.3	93	7	71-156/21
75-01-4	Vinyl chloride	1.0 U		25	29.4	118	28.9	116	2	69-159/18
108-05-4	Vinyl Acetate	10 U		125	121	97	120	96	1	43-154/14
	m,p-Xylene	2.0 U		50	58.7	117	56.3	113	4	79-126/15
95-47-6	o-Xylene	1.0 U		25	28.5	114	28.3	113	1	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9480-11MS	P20313.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11MSD	P20314.D	1	11/04/13	EG	n/a	n/a	VP768
FA9480-11	P20311.D	1	11/04/13	EG	n/a	n/a	VP768

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-3, FA9375-4, FA9375-5, FA9375-6, FA9375-7, FA9375-8

CAS No.	Surrogate Recoveries	MS	MSD	FA9480-11	Limits
1868-53-7	Dibromofluoromethane	101%	100%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	106%	103%	79-125%
2037-26-5	Toluene-D8	97%	94%	99%	85-112%
460-00-4	4-Bromofluorobenzene	96%	97%	105%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9375-5MS	P20344.D	10	11/05/13	EG	n/a	n/a	VP769
FA9375-5MSD	P20345.D	10	11/05/13	EG	n/a	n/a	VP769
FA9375-5	P20341.D	10	11/05/13	EG	n/a	n/a	VP769

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9375-5, FA9375-7

CAS No.	Compound	FA9375-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	882		250	1110	91	1060	71* [a]	5	81-122/14
95-50-1	o-Dichlorobenzene	283		250	544	104	544	104	0	82-124/14
98-82-8	Isopropylbenzene	323		250	617	118	600	111	3	83-132/15

CAS No.	Surrogate Recoveries	MS	MSD	FA9375-5	Limits
1868-53-7	Dibromofluoromethane	101%	97%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	102%	105%	79-125%
2037-26-5	Toluene-D8	97%	96%	98%	85-112%
460-00-4	4-Bromofluorobenzene	95%	99%	102%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MB	X031383.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-1

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MB	X031383.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MB	X031383.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-1

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	69%	42-108%
321-60-8	2-Fluorobiphenyl	69%	40-106%
1718-51-0	Terphenyl-d14	94%	39-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile [a]		0	ug/l	

(a) No TICs detected.

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MB	X031433.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-3, FA9375-5, FA9375-7

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MB	X031433.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-3, FA9375-5, FA9375-7

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MB	X031433.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-3, FA9375-5, FA9375-7

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	76%	42-108%
321-60-8	2-Fluorobiphenyl	69%	40-106%
1718-51-0	Terphenyl-d14	80%	39-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile [a]		0	ug/l	

(a) No TICs detected.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-BS	X031382.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	13.3	13	10-69
95-57-8	2-Chlorophenol	50	27.3	55	52-98
59-50-7	4-Chloro-3-methyl phenol	50	31.5	63	54-103
120-83-2	2,4-Dichlorophenol	50	31.3	63	53-103
105-67-9	2,4-Dimethylphenol	50	26.3	53	43-90
51-28-5	2,4-Dinitrophenol	100	71.4	71	44-112
534-52-1	4,6-Dinitro-o-cresol	100	86.7	87	66-121
95-48-7	2-Methylphenol	50	22.0	44	43-90
	3&4-Methylphenol	100	40.6	41	36-88
88-75-5	2-Nitrophenol	50	31.4	63	53-102
100-02-7	4-Nitrophenol	100	20.0	20	18-62
87-86-5	Pentachlorophenol	100	83.4	83	61-115
108-95-2	Phenol	50	11.4	23	19-56
95-95-4	2,4,5-Trichlorophenol	50	35.9	72	62-109
88-06-2	2,4,6-Trichlorophenol	50	35.6	71	59-107
83-32-9	Acenaphthene	50	36.1	72	61-107
208-96-8	Acenaphthylene	50	37.1	74	60-104
62-53-3	Aniline	50	30.6	61	47-100
120-12-7	Anthracene	50	40.3	81	65-108
92-87-5	Benzidine	50	26.9	54	25-99
56-55-3	Benzo(a)anthracene	50	39.6	79	66-111
50-32-8	Benzo(a)pyrene	50	38.4	77	62-107
205-99-2	Benzo(b)fluoranthene	50	38.6	77	65-114
191-24-2	Benzo(g,h,i)perylene	50	43.5	87	66-116
207-08-9	Benzo(k)fluoranthene	50	40.7	81	65-114
101-55-3	4-Bromophenyl phenyl ether	50	33.1	66	65-109
85-68-7	Butyl benzyl phthalate	50	38.6	77	65-112
100-51-6	Benzyl Alcohol	50	26.0	52	46-94
91-58-7	2-Chloronaphthalene	50	33.5	67	57-103
106-47-8	4-Chloroaniline	50	33.3	67	49-105
86-74-8	Carbazole	50	39.9	80	59-113
218-01-9	Chrysene	50	42.1	84	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	32.2	64	51-102
111-44-4	bis(2-Chloroethyl)ether	50	29.8	60	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	30.7	61	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	34.9	70	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-BS	X031382.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	28.8	58	48-97
122-66-7	1,2-Diphenylhydrazine	50	38.3	77	61-110
541-73-1	1,3-Dichlorobenzene	50	30.4	61	45-95
106-46-7	1,4-Dichlorobenzene	50	30.0	60	45-98
121-14-2	2,4-Dinitrotoluene	50	37.0	74	61-110
606-20-2	2,6-Dinitrotoluene	50	36.5	73	63-108
91-94-1	3,3'-Dichlorobenzidine	50	43.4	87	46-117
53-70-3	Dibenzo(a,h)anthracene	50	41.4	83	66-119
132-64-9	Dibenzofuran	50	37.1	74	61-106
84-74-2	Di-n-butyl phthalate	50	38.0	76	65-107
117-84-0	Di-n-octyl phthalate	50	37.4	75	62-118
84-66-2	Diethyl phthalate	50	36.7	73	64-108
131-11-3	Dimethyl phthalate	50	36.6	73	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	40.3	81	61-117
206-44-0	Fluoranthene	50	39.8	80	63-106
86-73-7	Fluorene	50	39.1	78	62-108
118-74-1	Hexachlorobenzene	50	38.7	77	63-108
87-68-3	Hexachlorobutadiene	50	32.6	65	42-102
77-47-4	Hexachlorocyclopentadiene	50	25.1	50	39-102
67-72-1	Hexachloroethane	50	30.0	60	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	40.1	80	64-119
78-59-1	Isophorone	50	30.6	61	43-87
90-12-0	1-Methylnaphthalene	50	32.7	65	53-102
91-57-6	2-Methylnaphthalene	50	32.3	65	51-102
88-74-4	2-Nitroaniline	50	38.5	77	54-128
99-09-2	3-Nitroaniline	50	38.3	77	56-106
100-01-6	4-Nitroaniline	50	39.3	79	55-120
91-20-3	Naphthalene	50	35.0	70	47-100
98-95-3	Nitrobenzene	50	31.2	62	50-104
62-75-9	N-Nitrosodimethylamine	50	16.5	33	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	31.2	62	52-104
86-30-6	N-Nitrosodiphenylamine	50	38.6	77	64-108
85-01-8	Phenanthrene	50	40.9	82	66-110
129-00-0	Pyrene	50	38.6	77	64-113
110-86-1	Pyridine	50	16.3	33	23-74
120-82-1	1,2,4-Trichlorobenzene	50	30.3	61	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-BS	X031382.D	1	11/01/13	FS	10/29/13	OP49203	SX1489

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-1

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	65%	42-108%
321-60-8	2-Fluorobiphenyl	69%	40-106%
1718-51-0	Terphenyl-d14	85%	39-121%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-BS	X031432.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-3, FA9375-5, FA9375-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	18.1	18	10-69
95-57-8	2-Chlorophenol	50	37.3	75	52-98
59-50-7	4-Chloro-3-methyl phenol	50	41.1	82	54-103
120-83-2	2,4-Dichlorophenol	50	35.1	70	53-103
105-67-9	2,4-Dimethylphenol	50	34.1	68	43-90
51-28-5	2,4-Dinitrophenol	100	70.8	71	44-112
534-52-1	4,6-Dinitro-o-cresol	100	73.3	73	66-121
95-48-7	2-Methylphenol	50	34.5	69	43-90
	3&4-Methylphenol	100	68.7	69	36-88
88-75-5	2-Nitrophenol	50	37.2	74	53-102
100-02-7	4-Nitrophenol	100	31.6	32	18-62
87-86-5	Pentachlorophenol	100	83.3	83	61-115
108-95-2	Phenol	50	16.0	32	19-56
95-95-4	2,4,5-Trichlorophenol	50	43.4	87	62-109
88-06-2	2,4,6-Trichlorophenol	50	43.0	86	59-107
83-32-9	Acenaphthene	50	41.6	83	61-107
208-96-8	Acenaphthylene	50	44.5	89	60-104
62-53-3	Aniline	50	40.1	80	47-100
120-12-7	Anthracene	50	43.5	87	65-108
92-87-5	Benzidine	50	24.1	48	25-99
56-55-3	Benzo(a)anthracene	50	42.9	86	66-111
50-32-8	Benzo(a)pyrene	50	42.0	84	62-107
205-99-2	Benzo(b)fluoranthene	50	43.4	87	65-114
191-24-2	Benzo(g,h,i)perylene	50	43.9	88	66-116
207-08-9	Benzo(k)fluoranthene	50	44.3	89	65-114
101-55-3	4-Bromophenyl phenyl ether	50	34.8	70	65-109
85-68-7	Butyl benzyl phthalate	50	43.3	87	65-112
100-51-6	Benzyl Alcohol	50	36.6	73	46-94
91-58-7	2-Chloronaphthalene	50	41.5	83	57-103
106-47-8	4-Chloroaniline	50	44.6	89	49-105
86-74-8	Carbazole	50	38.8	78	59-113
218-01-9	Chrysene	50	44.7	89	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	37.5	75	51-102
111-44-4	bis(2-Chloroethyl)ether	50	39.3	79	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	38.4	77	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	34.4	69	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-BS	X031432.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-3, FA9375-5, FA9375-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	35.4	71	48-97
122-66-7	1,2-Diphenylhydrazine	50	41.5	83	61-110
541-73-1	1,3-Dichlorobenzene	50	35.6	71	45-95
106-46-7	1,4-Dichlorobenzene	50	37.5	75	45-98
121-14-2	2,4-Dinitrotoluene	50	38.1	76	61-110
606-20-2	2,6-Dinitrotoluene	50	41.9	84	63-108
91-94-1	3,3'-Dichlorobenzidine	50	42.3	85	46-117
53-70-3	Dibenzo(a,h)anthracene	50	44.1	88	66-119
132-64-9	Dibenzofuran	50	40.4	81	61-106
84-74-2	Di-n-butyl phthalate	50	40.5	81	65-107
117-84-0	Di-n-octyl phthalate	50	59.4	119*	62-118
84-66-2	Diethyl phthalate	50	36.6	73	64-108
131-11-3	Dimethyl phthalate	50	41.3	83	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	39.9	80	61-117
206-44-0	Fluoranthene	50	40.4	81	63-106
86-73-7	Fluorene	50	38.4	77	62-108
118-74-1	Hexachlorobenzene	50	40.1	80	63-108
87-68-3	Hexachlorobutadiene	50	40.7	81	42-102
77-47-4	Hexachlorocyclopentadiene	50	31.4	63	39-102
67-72-1	Hexachloroethane	50	37.0	74	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	40.8	82	64-119
78-59-1	Isophorone	50	38.0	76	43-87
90-12-0	1-Methylnaphthalene	50	41.6	83	53-102
91-57-6	2-Methylnaphthalene	50	41.5	83	51-102
88-74-4	2-Nitroaniline	50	46.4	93	54-128
99-09-2	3-Nitroaniline	50	44.3	89	56-106
100-01-6	4-Nitroaniline	50	38.0	76	55-120
91-20-3	Naphthalene	50	42.8	86	47-100
98-95-3	Nitrobenzene	50	35.2	70	50-104
62-75-9	N-Nitrosodimethylamine	50	29.1	58	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	41.0	82	52-104
86-30-6	N-Nitrosodiphenylamine	50	36.9	74	64-108
85-01-8	Phenanthrene	50	43.4	87	66-110
129-00-0	Pyrene	50	35.2	70	64-113
110-86-1	Pyridine	50	27.9	56	23-74
120-82-1	1,2,4-Trichlorobenzene	50	36.9	74	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-BS	X031432.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-3, FA9375-5, FA9375-7

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	73%	42-108%
321-60-8	2-Fluorobiphenyl	85%	40-106%
1718-51-0	Terphenyl-d14	81%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MS	X031391.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
OP49203-MSD	X031392.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
JB51048-3	T010374.D	1	11/05/13	FS	10/29/13	OP49203	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-1

CAS No.	Compound	JB51048-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		200	85.5	43	69.5	35	21	10-69/39
95-57-8	2-Chlorophenol	ND		100	69.2	69	65.5	66	5	52-98/25
59-50-7	4-Chloro-3-methyl phenol	ND		100	78.1	78	76.7	77	2	54-103/23
120-83-2	2,4-Dichlorophenol	ND		100	74.5	75	70.9	71	5	53-103/26
105-67-9	2,4-Dimethylphenol	ND		100	77.7	78	74.3	74	4	43-90/27
51-28-5	2,4-Dinitrophenol	ND		200	153	77	137	69	11	44-112/25
534-52-1	4,6-Dinitro-o-cresol	ND		200	178	89	165	83	8	66-121/23
95-48-7	2-Methylphenol	ND		100	66.5	67	66.8	67	0	43-90/28
	3&4-Methylphenol	ND		200	135	68	136	68	1	36-88/28
88-75-5	2-Nitrophenol	ND		100	74.6	75	70.1	70	6	53-102/29
100-02-7	4-Nitrophenol	ND		200	103	52	104	52	1	18-62/33
87-86-5	Pentachlorophenol	ND		200	192	96	177	89	8	61-115/26
108-95-2	Phenol	ND		100	45.5	46	47.8	48	5	19-56/35
95-95-4	2,4,5-Trichlorophenol	ND		100	83.4	83	79.8	80	4	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		100	81.9	82	78.3	78	4	59-107/23
83-32-9	Acenaphthene	1.3	J	100	88.3	87	82.8	82	6	61-107/22
208-96-8	Acenaphthylene	ND		100	87.5	88	83.7	84	4	60-104/22
62-53-3	Aniline	3.9	J	100	99.7	96	94.9	91	5	47-100/30
120-12-7	Anthracene	ND		100	88.2	88	84.9	85	4	65-108/20
92-87-5	Benzidine	59.5		100	13.6	-46*	31.5	-28*	79*	25-99/31
56-55-3	Benzo(a)anthracene	ND		100	87.6	88	86.8	87	1	66-111/22
50-32-8	Benzo(a)pyrene	ND		100	84.5	85	82.9	83	2	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		100	84.7	85	83.8	84	1	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		100	93.3	93	88.5	89	5	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		100	83.1	83	85.5	86	3	65-114/24
101-55-3	4-Bromophenyl phenyl ether	ND		100	71.4	71	68.4	68	4	65-109/23
85-68-7	Butyl benzyl phthalate	ND		100	84.1	84	88.7	89	5	65-112/24
100-51-6	Benzyl Alcohol	ND		100	81.7	82	81.3	81	0	46-94/27
91-58-7	2-Chloronaphthalene	ND		100	80.2	80	76.7	77	4	57-103/23
106-47-8	4-Chloroaniline	11.1		100	84.5	73	81.5	70	4	49-105/27
86-74-8	Carbazole	ND		100	87.8	88	85.1	85	3	59-113/21
218-01-9	Chrysene	ND		100	92.1	92	88.3	88	4	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	ND		100	78.1	78	73.6	74	6	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		100	72.1	72	69.2	69	4	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	75.7	76	73.9	74	2	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	81.0	81	77.7	78	4	62-105/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MS	X031391.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
OP49203-MSD	X031392.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
JB51048-3	T010374.D	1	11/05/13	FS	10/29/13	OP49203	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-1

CAS No.	Compound	JB51048-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		100	71.4	71	70.7	71	1	48-97/24
122-66-7	1,2-Diphenylhydrazine	ND		100	87.0	87	82.8	83	5	61-110/24
541-73-1	1,3-Dichlorobenzene	ND		100	73.2	73	69.7	70	5	45-95/25
106-46-7	1,4-Dichlorobenzene	ND		100	75.2	75	72.3	72	4	45-98/25
121-14-2	2,4-Dinitrotoluene	ND		100	82.4	82	79.1	79	4	61-110/21
606-20-2	2,6-Dinitrotoluene	ND		100	81.4	81	77.5	78	5	63-108/21
91-94-1	3,3'-Dichlorobenzidine	4.5	J	100	73.6	69	75.4	71	2	46-117/29
53-70-3	Dibenzo(a,h)anthracene	ND		100	87.9	88	83.6	84	5	66-119/24
132-64-9	Dibenzofuran	ND		100	85.2	85	82.3	82	3	61-106/21
84-74-2	Di-n-butyl phthalate	ND		100	85.7	86	81.0	81	6	65-107/21
117-84-0	Di-n-octyl phthalate	ND		100	82.9	83	89.2	89	7	62-118/24
84-66-2	Diethyl phthalate	ND		100	82.5	83	80.2	80	3	64-108/21
131-11-3	Dimethyl phthalate	ND		100	80.7	81	78.0	78	3	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	1.4	J	100	89.2	88	91.8	90	3	61-117/23
206-44-0	Fluoranthene	0.84	J	100	91.3	90	84.4	84	8	63-106/21
86-73-7	Fluorene	ND		100	92.2	92	87.2	87	6	62-108/20
118-74-1	Hexachlorobenzene	ND		100	83.7	84	81.0	81	3	63-108/22
87-68-3	Hexachlorobutadiene	ND		100	78.4	78	74.5	75	5	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND		100	51.8	52	48.0	48	8	39-102/29
67-72-1	Hexachloroethane	ND		100	73.5	74	72.9	73	1	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	87.2	87	81.7	82	7	64-119/24
78-59-1	Isophorone	ND		100	73.8	74	70.1	70	5	43-87/25
90-12-0	1-Methylnaphthalene	4.4	J	100	91.1	87	86.3	82	5	53-102/27
91-57-6	2-Methylnaphthalene	ND		100	79.8	80	77.6	78	3	51-102/26
88-74-4	2-Nitroaniline	ND		100	87.1	87	83.3	83	4	54-128/24
99-09-2	3-Nitroaniline	ND		100	84.6	85	82.6	83	2	56-106/27
100-01-6	4-Nitroaniline	ND		100	89.8	90	86.6	87	4	55-120/24
91-20-3	Naphthalene	5.4		100	87.1	82	82.5	77	5	47-100/29
98-95-3	Nitrobenzene	ND		100	74.7	75	72.9	73	2	50-104/28
62-75-9	N-Nitrosodimethylamine	ND		100	68.1	68	67.6	68	1	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	ND		100	76.4	76	74.5	75	3	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND		100	101	101	96.5	97	5	64-108/23
85-01-8	Phenanthrene	ND		100	88.7	89	85.3	85	4	66-110/21
129-00-0	Pyrene	0.87	J	100	83.6	83	97.0	96	15	64-113/23
110-86-1	Pyridine	ND		100	67.3	67	67.7	68	1	23-74/34
120-82-1	1,2,4-Trichlorobenzene	ND		100	73.3	73	70.1	70	4	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49203-MS	X031391.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
OP49203-MSD	X031392.D	1	11/01/13	FS	10/29/13	OP49203	SX1489
JB51048-3	T010374.D	1	11/05/13	FS	10/29/13	OP49203	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-1

CAS No.	Surrogate Recoveries	MS	MSD	JB51048-3	Limits
4165-60-0	Nitrobenzene-d5	75%	73%	76%	42-108%
321-60-8	2-Fluorobiphenyl	81%	77%	79%	40-106%
1718-51-0	Terphenyl-d14	90%	89%	86%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MS	X031438.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
OP49235-MSD	X031439.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
JB51050-7	X031437.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-3, FA9375-5, FA9375-7

CAS No.	Compound	JB51050-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		208	79.4	38	81.2	39	2	10-69/39
95-57-8	2-Chlorophenol	ND		104	78.5	75	74.8	72	5	52-98/25
59-50-7	4-Chloro-3-methyl phenol	ND		104	83.2	80	87.9	84	5	54-103/23
120-83-2	2,4-Dichlorophenol	ND		104	82.7	79	85.0	82	3	53-103/26
105-67-9	2,4-Dimethylphenol	ND		104	82.7	79	85.8	82	4	43-90/27
51-28-5	2,4-Dinitrophenol	ND		208	111	53	112	54	1	44-112/25
534-52-1	4,6-Dinitro-o-cresol	ND		208	134	64*	138	66	3	66-121/23
95-48-7	2-Methylphenol	ND		104	85.5	82	75.7	73	12	43-90/28
	3&4-Methylphenol	ND		208	174	84	154	74	12	36-88/28
88-75-5	2-Nitrophenol	ND		104	83.3	80	86.4	83	4	53-102/29
100-02-7	4-Nitrophenol	ND		208	102	49	114	55	11	18-62/33
87-86-5	Pentachlorophenol	ND		208	162	78	168	81	4	61-115/26
108-95-2	Phenol	ND		104	54.7	53	52.6	50	4	19-56/35
95-95-4	2,4,5-Trichlorophenol	ND		104	82.2	79	83.7	80	2	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		104	80.3	77	81.9	79	2	59-107/23
83-32-9	Acenaphthene	0.77	J	104	85.9	82	87.0	83	1	61-107/22
208-96-8	Acenaphthylene	ND		104	86.2	83	86.9	83	1	60-104/22
62-53-3	Aniline	ND		104	103	99	51.8	50	66*	47-100/30
120-12-7	Anthracene	ND		104	88.4	85	92.2	89	4	65-108/20
56-55-3	Benzo(a)anthracene	ND		104	86.1	83	91.2	88	6	66-111/22
50-32-8	Benzo(a)pyrene	ND		104	82.7	79	87.3	84	5	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		104	87.2	84	92.3	89	6	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		104	85.1	82	90.0	86	6	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		104	83.9	81	90.5	87	8	65-114/24
101-55-3	4-Bromophenyl phenyl ether	ND		104	72.5	70	76.6	74	5	65-109/23
85-68-7	Butyl benzyl phthalate	ND		104	85.2	82	90.7	87	6	65-112/24
100-51-6	Benzyl Alcohol	ND		104	79.3	76	72.5	70	9	46-94/27
91-58-7	2-Chloronaphthalene	ND		104	79.8	77	80.6	77	1	57-103/23
106-47-8	4-Chloroaniline	ND		104	64.0	61	75.4	72	16	49-105/27
86-74-8	Carbazole	ND		104	86.1	83	90.0	86	4	59-113/21
218-01-9	Chrysene	ND		104	89.3	86	93.9	90	5	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	ND		104	84.2	81	86.8	83	3	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		104	172	165*	92.9	89	60*	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		104	87.4	84	79.7	77	9	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	ND		104	79.9	77	81.4	78	2	62-105/20
95-50-1	1,2-Dichlorobenzene	ND		104	81.1	78	73.6	71	10	48-97/24

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MS	X031438.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
OP49235-MSD	X031439.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
JB51050-7	X031437.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-3, FA9375-5, FA9375-7

CAS No.	Compound	JB51050-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
122-66-7	1,2-Diphenylhydrazine	ND		104	83.4	80	86.5	83	4	61-110/24
541-73-1	1,3-Dichlorobenzene	ND		104	75.1	72	75.4	72	0	45-95/25
106-46-7	1,4-Dichlorobenzene	ND		104	75.4	72	78.5	75	4	45-98/25
121-14-2	2,4-Dinitrotoluene	ND		104	79.7	77	81.9	79	3	61-110/21
606-20-2	2,6-Dinitrotoluene	ND		104	79.6	72	82.5	75	4	63-108/21
53-70-3	Dibenzo(a,h)anthracene	ND		104	88.8	85	95.5	92	7	66-119/24
132-64-9	Dibenzofuran	ND		104	83.5	80	85.1	82	2	61-106/21
84-74-2	Di-n-butyl phthalate	ND		104	83.1	80	87.7	84	5	65-107/21
117-84-0	Di-n-octyl phthalate	ND		104	90.8	87	95.9	92	5	62-118/24
84-66-2	Diethyl phthalate	ND		104	82.9	80	86.0	83	4	64-108/21
131-11-3	Dimethyl phthalate	ND		104	78.8	76	81.0	78	3	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND		104	87.6	84	92.8	89	6	61-117/23
206-44-0	Fluoranthene	ND		104	87.8	84	91.0	87	4	63-106/21
86-73-7	Fluorene	ND		104	88.2	85	90.5	87	3	62-108/20
118-74-1	Hexachlorobenzene	ND		104	83.0	80	88.4	85	6	63-108/22
87-68-3	Hexachlorobutadiene	ND		104	85.1	82	86.8	83	2	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND		104	60.0	58	58.8	56	2	39-102/29
67-72-1	Hexachloroethane	ND		104	83.4	80	77.0	74	8	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		104	80.0	77	86.6	83	8	64-119/24
78-59-1	Isophorone	ND		104	81.1	78	83.6	80	3	43-87/25
90-12-0	1-Methylnaphthalene	ND		104	83.5	80	86.3	83	3	53-102/27
91-57-6	2-Methylnaphthalene	ND		104	83.1	80	84.0	81	1	51-102/26
88-74-4	2-Nitroaniline	ND		104	91.5	88	91.4	88	0	54-128/24
99-09-2	3-Nitroaniline	ND		104	64.7	62	73.8	71	13	56-106/27
100-01-6	4-Nitroaniline	ND		104	62.0	60	73.4	70	17	55-120/24
91-20-3	Naphthalene	ND		104	86.6	83	89.7	86	4	47-100/29
98-95-3	Nitrobenzene	ND		104	80.0	77	82.4	79	3	50-104/28
62-75-9	N-Nitrosodimethylamine	ND		104	63.7	61	65.1	62	2	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	ND		104	84.4	81	73.8	71	13	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND		104	84.2	81	88.9	85	5	64-108/23
85-01-8	Phenanthrene	ND		104	88.2	85	92.0	88	4	66-110/21
129-00-0	Pyrene	ND		104	83.1	80	89.5	86	7	64-113/23
110-86-1	Pyridine	ND		104	50.7	49	57.3	55	12	23-74/34
120-82-1	1,2,4-Trichlorobenzene	ND		104	79.4	76	80.4	77	1	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MS	X031438.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
OP49235-MSD	X031439.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
JB51050-7	X031437.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9375-3, FA9375-5, FA9375-7

CAS No.	Surrogate Recoveries	MS	MSD	JB51050-7	Limits
4165-60-0	Nitrobenzene-d5	80%	81%	85%	42-108%
321-60-8	2-Fluorobiphenyl	77%	77%	73%	40-106%
1718-51-0	Terphenyl-d14	85%	91%	84%	39-121%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5084-MB	CD124542.D	1	10/25/13	CP	n/a	n/a	GCD5084

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-1, FA9375-3, FA9375-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	76%	70-131%
98-08-8	aaa-Trifluorotoluene	90%	69-143%

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5093-MB	CD124784.D	1	11/04/13	CP	n/a	n/a	GCD5093

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	56-149%
98-08-8	aaa-Trifluorotoluene	95%	66-132%

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5084-BS	CD124541.D	1	10/25/13	CP	n/a	n/a	GCD5084

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-1, FA9375-3, FA9375-5

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.428	107	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	85%	70-131%
98-08-8	aaa-Trifluorotoluene	106%	69-143%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5093-BS	CD124783.D	1	11/04/13	CP	n/a	n/a	GCD5093

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.430	108	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	102%	56-149%
98-08-8	aaa-Trifluorotoluene	107%	66-132%

8.2.2

8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9288-1MS	CD124549.D	1	10/25/13	CP	n/a	n/a	GCD5084
FA9288-1MSD	CD124550.D	1	10/25/13	CP	n/a	n/a	GCD5084
FA9288-1	CD124548.D	1	10/25/13	CP	n/a	n/a	GCD5084

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-1, FA9375-3, FA9375-5

CAS No.	Compound	FA9288-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.0967	J	0.4	0.508	103	0.504	102	1	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA9288-1	Limits
460-00-4	4-Bromofluorobenzene	91%	96%	85%	70-131%
98-08-8	aaa-Trifluorotoluene	106%	108%	97%	69-143%

8.3.1

8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9506-2MS	CD124794.D	1	11/04/13	CP	n/a	n/a	GCD5093
FA9506-2MSD	CD124795.D	1	11/04/13	CP	n/a	n/a	GCD5093
FA9506-2	CD124791.D	1	11/04/13	CP	n/a	n/a	GCD5093

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-7

CAS No.	Compound	FA9506-2 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		0.4	0.429	107	0.424	106	1	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA9506-2	Limits
460-00-4	4-Bromofluorobenzene	103%	102%	95%	70-131%
98-08-8	aaa-Trifluorotoluene	105%	108%	97%	69-143%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49193-MB	YY38914.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	55%	50-131%

Method Blank Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49233-MB	YY38986.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-3, FA9375-5, FA9375-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	101%	50-131%

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49193-BS	YY38913.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.601	60	56-123
	TPH (> C22-C36)	1	0.763	76	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	64%	50-131%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49233-BS	YY38985.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-3, FA9375-5, FA9375-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.740	74	56-123
	TPH (> C22-C36)	1	0.787	79	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	98%	50-131%

9.2.2

9

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49193-MS	YY38916.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
OP49193-MSD	YY38917.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431
FA9288-1	YY38915.D	1	10/31/13	SJL	10/28/13	OP49193	GYY1431

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-1

CAS No.	Compound	FA9288-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	1.76		1.85	1.77	1*	2.64	48*	39*	56-123/33
	TPH (> C22-C36)	0.101	J	1.85	1.19	59*	1.56	79	27	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA9288-1	Limits
84-15-1	o-Terphenyl	49%* [a]	69%	72%	50-131%

(a) Outside control limits.

9.3.1

9

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9375
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49233-MS	YY39000.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433
OP49233-MSD	YY39001.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433
FA9420-1	YY38991.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9375-3, FA9375-5, FA9375-7

CAS No.	Compound	FA9420-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	0.175	J	1.89	1.76	84	1.92	92	9	56-123/33
	TPH (> C22-C36)	ND		1.89	1.68	89	1.70	90	1	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA9420-1	Limits
84-15-1	o-Terphenyl	117%	123%	102%	50-131%

9.3.2

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:					11/06/13		11/06/13		11/06/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Aluminum	200	15	15						
Antimony	6.0	1.3	1.3						
Arsenic	10	1.6	2.5						
Barium	200	1	1						
Beryllium	4.0	.5	.5						
Cadmium	5.0	.5	.5						
Calcium	1000	50	50						
Chromium	10	1.8	2						
Cobalt	50	.5	.5						
Copper	25	1	1						
Iron	300	29	29	-8.4	<300	-8.5	<300	-10	<300
Lead	5.0	1.1	1.1						
Magnesium	5000	74	74						
Manganese	15	.7	.7	0.0	<15	0.10	<15	0.0	<15
Molybdenum	50	.6	1						
Nickel	40	.5	.5						
Potassium	10000	200	200						
Selenium	10	2	2						
Silver	10	.5	.5						
Sodium	10000	500	500						
Strontium	10	.5	.5						
Thallium	10	1.3	1.3						
Tin	50	.7	1.8						
Titanium	10	.9	1						
Vanadium	50	.5	1						
Zinc	20	3	5						

Associated samples MP26272: FA9375-1, FA9375-3, FA9375-7, FA9375-1F, FA9375-3F, FA9375-5F, FA9375-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			11/06/13					11/06/13	
Metal	FA9328-1 Original	DUP	RPD	QC Limits	FA9328-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron	0.00	38.2	200.0(a)	0-20	0.00	24300	26000	93.5	70-130
Lead									
Magnesium									
Manganese	658	673	2.3	0-20	658	1160	500	100.4	70-130
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP26272: FA9375-1, FA9375-3, FA9375-7, FA9375-1F, FA9375-3F, FA9375-5F, FA9375-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/06/13

Metal	FA9328-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	0.00	23900	26000	91.9	1.7	20
Lead						
Magnesium						
Manganese	658	1140	500	96.4	1.7	20
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP26272: FA9375-1, FA9375-3, FA9375-7, FA9375-1F, FA9375-3F, FA9375-5F, FA9375-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/06/13

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	26000	26000	100.0	85-115
Lead				
Magnesium				
Manganese	529	500	105.8	85-115
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP26272: FA9375-1, FA9375-3, FA9375-7, FA9375-1F, FA9375-3F, FA9375-5F, FA9375-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/06/13

Metal	FA9328-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	0.00	0.00	NC	0-10
Lead				
Magnesium				
Manganese	658	657	0.1	0-10
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP26272: FA9375-1, FA9375-3, FA9375-7, FA9375-1F, FA9375-3F, FA9375-5F, FA9375-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26272
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/06/13

Metal	Sample ml	Final ml	FA9328-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10			2724	0.2	150	3000	90.8	85-115
Lead										
Magnesium										
Manganese	9.8	10	657.5	644.35	685.8	0.2	2.5	50	82.9*(a)	85-115
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP26272: FA9375-1, FA9375-3, FA9375-7, FA9375-1F, FA9375-3F, FA9375-5F, FA9375-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26296
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/08/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	15	15		
Antimony	6.0	1.3	1.3		
Arsenic	10	1.6	2.5		
Barium	200	1	1		
Beryllium	4.0	.5	.5		
Cadmium	5.0	.5	.5		
Calcium	1000	50	50		
Chromium	10	1.8	2		
Cobalt	50	.5	.5		
Copper	25	1	1		
Iron	300	29	29	38.7	<300
Lead	5.0	1.1	1.1		
Magnesium	5000	74	74		
Manganese	15	.7	.7	0.70	<15
Molybdenum	50	.6	1		
Nickel	40	.5	.5		
Potassium	10000	200	200		
Selenium	10	2	2		
Silver	10	.5	.5		
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.3	1.3		
Tin	50	.7	1.8		
Titanium	10	.9	1		
Vanadium	50	.5	1		
Zinc	20	3	5		

Associated samples MP26296: FA9375-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26296
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			11/08/13					11/08/13	
Metal	FA8356-1R Original	DUP	RPD	QC Limits	FA8356-1R Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium	anr								
Beryllium									
Cadmium									
Calcium	anr								
Chromium	anr								
Cobalt									
Copper									
Iron	475	458	3.6	0-20	475	24800	26000	93.6	70-130
Lead									
Magnesium	anr								
Manganese	65.8	65.1	1.1	0-20	65.8	571	500	101.0	70-130
Molybdenum									
Nickel	anr								
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

Associated samples MP26296: FA9375-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26296
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/08/13

Metal	FA8356-1R Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium	anr					
Beryllium						
Cadmium						
Calcium	anr					
Chromium	anr					
Cobalt						
Copper						
Iron	475	25300	26000	95.5	2.0	20
Lead						
Magnesium	anr					
Manganese	65.8	572	500	101.2	0.2	20
Molybdenum						
Nickel	anr					
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	anr					

Associated samples MP26296: FA9375-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26296
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/08/13

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	anr			
Beryllium				
Cadmium				
Calcium	anr			
Chromium	anr			
Cobalt				
Copper				
Iron	25200	26000	96.9	85-115
Lead				
Magnesium	anr			
Manganese	512	500	102.4	85-115
Molybdenum				
Nickel	anr			
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP26296: FA9375-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26296
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/08/13

Metal	FA8356-1R Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	anr			
Beryllium				
Cadmium				
Calcium	anr			
Chromium	anr			
Cobalt				
Copper				
Iron	475	467	1.8	0-10
Lead				
Magnesium	anr			
Manganese	65.8	63.9	2.9	0-10
Molybdenum				
Nickel	anr			
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP26296: FA9375-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26296
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 11/08/13

Metal	Sample ml	Final ml	FA8356-1R Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10	475.4	465.892	3269	0.2	150	3000	93.4	85-115
Lead										
Magnesium										
Manganese	9.8	10	65.8	64.484	117.6	0.2	2.5	50	106.2	85-115
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP26296: FA9375-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP22749/GN58540	2.0	0.0	mg/l	198	170	85.9	85-115%
Chemical Oxygen Demand	GP22797/GN58560	20	0.0	mg/l	50.0	49.7	99.4	87-122%
Chloride	GP22758/GN58476	2.0	0.0	mg/l	50	50.2	100.4	90-110%
Fluoride	GP22758/GN58476	0.20	0.0	mg/l	2.5	2.56	102.4	90-110%
Iron, Ferrous	GN58448	0.10	0.0	mg/l	0.500	0.52	104.0	82-115%
Nitrogen, Ammonia	GP22829/GN58657	0.10	0.0	mg/l	2.5	2.62	104.8	90-110%
Nitrogen, Nitrate	GP22758/GN58476	0.10	0.0	mg/l	2.5	2.54	101.6	90-110%
Nitrogen, Total Kjeldahl	GP22754/GN58492	0.53	0.0	mg/l	2.63	2.78	105.9	90-110%
Solids, Total Dissolved	GN58474	100	10.0	mg/l				
Sulfate	GP22758/GN58476	2.0	0.0	mg/l	50	50.7	101.4	90-110%

Associated Samples:
Batch GN58448: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GN58474: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22749: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22754: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22758: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22797: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22829: FA9375-1, FA9375-3, FA9375-5, FA9375-7
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP22749/GN58540	FA9375-1	mg/l	4.0 U	0.0	0.0	0-30%
Iron, Ferrous	GN58448	FA9375-1	mg/l	0.039	0.039	0.0	0-31%
Solids, Total Dissolved	GN58474	FA9371-16	mg/l	306	309	1.0	0-5%

Associated Samples:
Batch GN58448: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GN58474: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22749: FA9375-1, FA9375-3, FA9375-5, FA9375-7
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP22797/GN58560	FA9375-1	mg/l	14.9	50.0	62.1	94.4	87-122%
Chloride	GP22758/GN58476	FA9371-12	mg/l	10.1	50	58.9	97.6	90-110%
Fluoride	GP22758/GN58476	FA9371-12	mg/l	1.5	2.5	4.0	100.0	90-110%
Nitrogen, Ammonia	GP22829/GN58657	FA9375-1	mg/l	0.030 U	2.5	2.8	112.0N(a)	90-110%
Nitrogen, Nitrate	GP22758/GN58476	FA9371-12	mg/l	0.050 U	2.5	2.4	96.0	90-110%
Nitrogen, Total Kjeldahl	GP22754/GN58492	FA9375-1	mg/l	1.0	2.63	3.7	102.9	90-110%
Sulfate	GP22758/GN58476	FA9371-12	mg/l	0.60 U	50	49.5	99.0	90-110%

Associated Samples:
Batch GP22754: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22758: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22797: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22829: FA9375-1, FA9375-3, FA9375-5, FA9375-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9375
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chemical Oxygen Demand	GP22797/GN58560	FA9375-1	mg/l	14.9	50.0	62.1	0.0	26%
Chloride	GP22758/GN58476	FA9371-12	mg/l	10.1	50	59.3	0.7	20%
Fluoride	GP22758/GN58476	FA9371-12	mg/l	1.5	2.5	4.0	0.0	20%
Nitrogen, Ammonia	GP22829/GN58657	FA9375-1	mg/l	0.030 U	2.5	2.8	0.0	20%
Nitrogen, Nitrate	GP22758/GN58476	FA9371-12	mg/l	0.050 U	2.5	2.4	0.0	20%
Nitrogen, Total Kjeldahl	GP22754/GN58492	FA9375-1	mg/l	1.0	2.63	3.7	0.0	20%
Sulfate	GP22758/GN58476	FA9371-12	mg/l	0.60 U	50	49.4	0.2	20%

Associated Samples:
Batch GP22754: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22758: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22797: FA9375-1, FA9375-3, FA9375-5, FA9375-7
Batch GP22829: FA9375-1, FA9375-3, FA9375-5, FA9375-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Southeast ACCUTEST LABORATORIES

11/11/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA9376

Sampling Dates: 10/22/13 - 10/23/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **110**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

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Accutest LabLink@146533 10:09 11-Nov-2013

Sample Summary

Bhate Environmental

Job No: FA9376

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA9376-1	10/22/13	13:40	DMZB	10/24/13	SO	Soil	SS61-SB70C-28
FA9376-2	10/22/13	13:40	DMZB	10/24/13	SO	Soil	SS61-SB70C-28-A
FA9376-3	10/22/13	15:05	DMZB	10/24/13	SO	Soil	SS61-SB71C-28
FA9376-4	10/23/13	09:20	DMZB	10/24/13	SO	Soil	SS61-SB72C-29
FA9376-5	10/23/13	10:55	DMZB	10/24/13	SO	Soil	SS61-SB73C-27
FA9376-6	10/22/13	00:00	DMZB	10/24/13	SO	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA9376

Site: Holloman AFB; SS61 VCM **Report Date** 11/9/2013 12:25:12 PM

5 Samples and 1 Trip Blank were collected between 10/22/2013 and 10/23/2013 and were received at Accutest SE on 10/24/2013 properly preserved, at 2.6 Deg. C and intact. These Samples received an Accutest job number of FA9376. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO **Batch ID:** VH3125

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9472-8MS, FA9472-8MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 2-Chloroethyl vinyl ether, 2-Hexanone, Acrolein, Carbon disulfide, cis-1,3-Dichloropropene, Hexachlorobutadiene, Hexane, Methyl chloride, Methyl Tert Butyl Ether, n-Butylbenzene, Naphthalene, p-Isopropyltoluene, sec-Butylbenzene, Styrene, tert-Butylbenzene, Tetrachloroethylene, Vinyl Acetate, Vinyl chloride are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 2-Chloroethyl vinyl ether, 2-Hexanone, Acrolein, Carbon disulfide, cis-1,3-Dichloropropene, Hexachlorobutadiene, Hexane, Isopropylbenzene, m-Dichlorobenzene, Methyl Tert Butyl Ether, n-Butylbenzene, Naphthalene, o-Xylene, p-Dichlorobenzene, p-Isopropyltoluene, sec-Butylbenzene, Styrene, tert-Butylbenzene, Tetrachloroethylene, Vinyl Acetate are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Vinyl Acetate are outside control limits for sample FA9472-8MSD. Probable cause is due to sample non-homogeneity.

Matrix: SO **Batch ID:** VH3126

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9376-3MS, FA9376-3MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Vinyl chloride are outside control limits. Sporadic marginal failure.

Matrix Spike Recovery(s) for 1,2-Dibromo-3-chloropropane, 2,2-Dichloropropane, Acrolein, Bromodichloromethane, cis-1,3-Dichloropropene, tert-Butylbenzene are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,1,2-Trichloroethane, 1,2,3-Trichloropropane, 1,2-Dibromo-3-chloropropane, 2,2-Dichloropropane, Acrolein, Bromodichloromethane, Carbon disulfide, cis-1,3-Dichloropropene, Dichlorodifluoromethane, Hexachlorobutadiene, Hexane, tert-Butylbenzene are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for 1,2-Dibromo-3-chloropropane, 2,2-Dichloropropane, cis-1,3-Dichloropropene, Dichlorodifluoromethane are outside control limits for sample FA9376-3MSD. Probable cause is due to sample non-homogeneity.

FA9376-3 for Vinyl chloride: Associated BS recovery outside control limits.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP49247

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9292-1RMS, FA9292-1RMSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP49247

Matrix Spike Recovery(s) for Benzidine are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 4,6-Dinitro-o-cresol, Benzidine, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Chrysene, Diethyl phthalate, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for 3,3'-Dichlorobenzidine, Aniline, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Di-n-octyl phthalate, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene are outside control limits for sample OP49247-MSD. Probable cause is due to sample non-homogeneity.

Matrix: SO **Batch ID:** OP49263

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9385-8MS, FA9385-8MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for 3,3'-Dichlorobenzidine, 4-Nitroaniline are outside control limits. Blank Spike recoveries are biased high. Analytes are non-detect in associated samples; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 4-Nitroaniline, Carbazole are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Carbazole are outside control limits. Probable cause is due to matrix interference.

Volatiles by GC By Method SW846 8015C

Matrix: SO **Batch ID:** GCD5090

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9524-21MS, FA9524-21MSD were used as the QC samples indicated.

Sample(s) FA9376-1, FA9376-2, FA9376-2MS, FA9376-2MSD have surrogates outside control limits. Probable cause is due to matrix interference.

FA9376-1 for aaa-Trifluorotoluene: Result reported from PID.

FA9376-1 for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

Matrix: SO **Batch ID:** GCD5091

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9376-2MS, FA9376-2MSD were used as the QC samples indicated.

Sample(s) FA9376-1, FA9376-2, FA9376-2MS, FA9376-2MSD have surrogates outside control limits. Probable cause is due to matrix interference.

FA9376-2 for aaa-Trifluorotoluene: Result reported from PID.

FA9376-2 for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

FA9376-2MS for 4-Bromofluorobenzene: Result reported from PID.

FA9376-2MS for 4-Bromofluorobenzene: Outside control limits due to matrix interference.

FA9376-2MS for aaa-Trifluorotoluene: Result reported from PID.

FA9376-2MS for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

FA9376-2MSD for 4-Bromofluorobenzene: Result reported from PID.

FA9376-2MSD for 4-Bromofluorobenzene: Outside control limits due to matrix interference.

FA9376-2MSD for aaa-Trifluorotoluene: Result reported from PID.

FA9376-2MSD for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

Matrix: SO **Batch ID:** GQR3397

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9581-21MS, FA9581-21MSD were used as the QC samples indicated.

Sample(s) FA9376-1, FA9376-2, FA9376-2MS, FA9376-2MSD have surrogates outside control limits. Probable cause is due to matrix interference.

Extractables by GC By Method SW846 8015C

Matrix: SO **Batch ID:** OP49288

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9516-8MS, FA9516-8MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for TPH (>C22-C36), TPH (C10-C22) are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN58521

Sample(s) FA9327-2DUP was used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN58654

Sample(s) FA9376-1DUP, FA9376-2DUP were used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: November 9, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA9376
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/22/13 thru 10/23/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA9376-1	**SS61-SB70C-28**					
Benzene		149 J	270	55	ug/kg	SW846 8260B
sec-Butylbenzene		9340	270	66	ug/kg	SW846 8260B
tert-Butylbenzene		6230	270	65	ug/kg	SW846 8260B
Isopropylbenzene		67700	2700	720	ug/kg	SW846 8260B
n-Propylbenzene		214 J	270	56	ug/kg	SW846 8260B
Acenaphthene		42.5 J	210	25	ug/kg	SW846 8270D
Anthracene		71.6 J	210	21	ug/kg	SW846 8270D
Benzo(a)anthracene		170 J	210	21	ug/kg	SW846 8270D
Benzo(a)pyrene		68.9 J	210	21	ug/kg	SW846 8270D
Benzo(b)fluoranthene		109 J	210	21	ug/kg	SW846 8270D
Benzo(g,h,i)perylene		34.3 J	210	21	ug/kg	SW846 8270D
Benzo(k)fluoranthene		84.8 J	210	25	ug/kg	SW846 8270D
Chrysene		180 J	210	21	ug/kg	SW846 8270D
Fluoranthene		458	210	21	ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		34.9 J	210	21	ug/kg	SW846 8270D
Pyrene		425	210	21	ug/kg	SW846 8270D
TPH-GRO (C6-C10)		3890	550	270	mg/kg	SW846 8015C
TPH (C10-C22)		7.18 J	10	4.2	mg/kg	SW846 8015C
TPH (> C22-C36)		4.63 J	10	4.2	mg/kg	SW846 8015C
FA9376-2	**SS61-SB70C-28-A**					
Benzene		64.4 J	270	53	ug/kg	SW846 8260B
sec-Butylbenzene		1880	270	65	ug/kg	SW846 8260B
tert-Butylbenzene		1880	270	64	ug/kg	SW846 8260B
Isopropylbenzene		8870	270	71	ug/kg	SW846 8260B
Benzo(a)anthracene		70.7 J	210	21	ug/kg	SW846 8270D
Benzo(a)pyrene		30.1 J	210	21	ug/kg	SW846 8270D
Benzo(b)fluoranthene		51.5 J	210	21	ug/kg	SW846 8270D
Benzo(k)fluoranthene		35.0 J	210	25	ug/kg	SW846 8270D
Chrysene		80.1 J	210	21	ug/kg	SW846 8270D
Fluoranthene		186 J	210	21	ug/kg	SW846 8270D
Pyrene		181 J	210	21	ug/kg	SW846 8270D
TPH-GRO (C6-C10)		1320	210	110	mg/kg	SW846 8015C
FA9376-3	**SS61-SB71C-28**					
Acetone		43.1	41	16	ug/kg	SW846 8260B
Carbon disulfide		2.7 J	4.1	1.6	ug/kg	SW846 8260B
Benzo(a)anthracene		29.3 J	210	21	ug/kg	SW846 8270D
Chrysene		27.0 J	210	21	ug/kg	SW846 8270D
Fluoranthene		61.2 J	210	21	ug/kg	SW846 8270D
Pyrene		48.5 J	210	21	ug/kg	SW846 8270D

Summary of Hits

Job Number: FA9376
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/22/13 thru 10/23/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TPH-GRO (C6-C10)		5.04 J	5.4	2.7	mg/kg	SW846 8015C
FA9376-4	**SS61-SB72C-29**					
sec-Butylbenzene		104 J	320	76	ug/kg	SW846 8260B
tert-Butylbenzene		150 J	320	75	ug/kg	SW846 8260B
Isopropylbenzene		654	320	83	ug/kg	SW846 8260B
TPH-GRO (C6-C10)		156	65	32	mg/kg	SW846 8015C
FA9376-5	**SS61-SB73C-27**					
Benzene		8800	270	55	ug/kg	SW846 8260B
n-Butylbenzene		148 J	270	71	ug/kg	SW846 8260B
sec-Butylbenzene		2510	270	66	ug/kg	SW846 8260B
tert-Butylbenzene		901	270	65	ug/kg	SW846 8260B
Ethylbenzene		24700	2700	600	ug/kg	SW846 8260B
Hexane		127 J	270	120	ug/kg	SW846 8260B
Isopropylbenzene		109000	2700	720	ug/kg	SW846 8260B
p-Isopropyltoluene		87.6 J	270	72	ug/kg	SW846 8260B
n-Propylbenzene		4470	270	56	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene		24700	2700	590	ug/kg	SW846 8260B
Toluene		182 J	270	55	ug/kg	SW846 8260B
m,p-Xylene		17600	550	110	ug/kg	SW846 8260B
o-Xylene		449	270	55	ug/kg	SW846 8260B
Phenol		83.9 J	200	33	ug/kg	SW846 8270D
Benzo(a)anthracene		36.9 J	200	20	ug/kg	SW846 8270D
Benzo(b)fluoranthene		22.8 J	200	20	ug/kg	SW846 8270D
Chrysene		36.4 J	200	20	ug/kg	SW846 8270D
Fluoranthene		83.3 J	200	20	ug/kg	SW846 8270D
Phenanthrene		60.0 J	200	20	ug/kg	SW846 8270D
Pyrene		66.4 J	200	20	ug/kg	SW846 8270D
TPH-GRO (C6-C10)		1400	220	110	mg/kg	SW846 8015C
TPH (C10-C22)		7.77 J	10	4.1	mg/kg	SW846 8015C
TPH (> C22-C36)		4.69 J	10	4.1	mg/kg	SW846 8015C
FA9376-6	**TRIP BLANK**					

No hits reported in this sample.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-SB70C-28		
Lab Sample ID:	FA9376-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	79.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0083004.D	1	10/26/13	EP	n/a	n/a	VH3125
Run #2	H0083026.D	1	10/28/13	EP	n/a	n/a	VH3126

	Initial Weight	Methanol Aliquot
Run #1	7.46 g	100 ul
Run #2	7.46 g	10.0 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2700	1100	ug/kg	
107-02-8	Acrolein	ND	1400	470	ug/kg	
107-13-1	Acrylonitrile	ND	1400	540	ug/kg	
71-43-2	Benzene	149	270	55	ug/kg	J
108-86-1	Bromobenzene	ND	270	59	ug/kg	
74-97-5	Bromochloromethane	ND	270	76	ug/kg	
75-27-4	Bromodichloromethane	ND	270	77	ug/kg	
75-25-2	Bromoform	ND	270	55	ug/kg	
104-51-8	n-Butylbenzene	ND	270	70	ug/kg	
135-98-8	sec-Butylbenzene	9340	270	66	ug/kg	
98-06-6	tert-Butylbenzene	6230	270	65	ug/kg	
108-90-7	Chlorobenzene	ND	270	55	ug/kg	
75-00-3	Chloroethane	ND	270	110	ug/kg	
67-66-3	Chloroform	ND	270	55	ug/kg	
95-49-8	o-Chlorotoluene	ND	270	55	ug/kg	
106-43-4	p-Chlorotoluene	ND	270	63	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	1400	550	ug/kg	
75-15-0	Carbon disulfide	ND	270	110	ug/kg	
56-23-5	Carbon tetrachloride	ND	270	62	ug/kg	
75-34-3	1,1-Dichloroethane	ND	270	55	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	270	67	ug/kg	
563-58-6	1,1-Dichloropropene	ND	270	55	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	270	140	ug/kg	
106-93-4	1,2-Dibromoethane	ND	270	55	ug/kg	
107-06-2	1,2-Dichloroethane	ND	270	65	ug/kg	
78-87-5	1,2-Dichloropropane	ND	270	55	ug/kg	
142-28-9	1,3-Dichloropropane	ND	270	55	ug/kg	
594-20-7	2,2-Dichloropropane	ND	270	55	ug/kg	
124-48-1	Dibromochloromethane	ND	270	55	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	270	55	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	270	55	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	270	55	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28		
Lab Sample ID:	FA9376-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	79.9
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	270	55	ug/kg	
95-50-1	o-Dichlorobenzene	ND	270	59	ug/kg	
106-46-7	p-Dichlorobenzene	ND	270	71	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	270	55	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	270	55	ug/kg	
100-41-4	Ethylbenzene	ND	270	60	ug/kg	
591-78-6	2-Hexanone	ND	1400	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	110	ug/kg	
110-54-3	Hexane	ND	270	120	ug/kg	
98-82-8	Isopropylbenzene	67700 [a]	2700	720	ug/kg	
99-87-6	p-Isopropyltoluene	ND	270	71	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1400	270	ug/kg	
74-83-9	Methyl bromide	ND	270	110	ug/kg	
74-87-3	Methyl chloride	ND	270	110	ug/kg	
74-95-3	Methylene bromide	ND	270	57	ug/kg	
75-09-2	Methylene chloride	ND	550	250	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1400	270	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	270	55	ug/kg	
91-20-3	Naphthalene	ND	270	110	ug/kg	
103-65-1	n-Propylbenzene	214	270	56	ug/kg	J
100-42-5	Styrene	ND	270	55	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	270	58	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	270	55	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	270	55	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	270	55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	270	57	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	270	88	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	64	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	270	59	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	270	57	ug/kg	
127-18-4	Tetrachloroethylene	ND	270	63	ug/kg	
108-88-3	Toluene	ND	270	55	ug/kg	
79-01-6	Trichloroethylene	ND	270	55	ug/kg	
75-69-4	Trichlorofluoromethane	ND	270	110	ug/kg	
75-01-4	Vinyl chloride	ND	270	55	ug/kg	
108-05-4	Vinyl Acetate	ND	1400	230	ug/kg	
	m,p-Xylene	ND	550	110	ug/kg	
95-47-6	o-Xylene	ND	270	55	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28		
Lab Sample ID:	FA9376-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	79.9
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	79%	90%	75-124%
2037-26-5	Toluene-D8	91%	85%	75-126%
460-00-4	4-Bromofluorobenzene	93%	93%	71-133%
17060-07-0	1,2-Dichloroethane-D4	83%	94%	72-135%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28		
Lab Sample ID:	FA9376-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	79.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L066564.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1000	210	ug/kg	
95-57-8	2-Chlorophenol	ND	210	25	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	23	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	31	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	210	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	420	83	ug/kg	
95-48-7	2-Methylphenol	ND	210	26	ug/kg	
	3&4-Methylphenol	ND	210	43	ug/kg	
88-75-5	2-Nitrophenol	ND	210	31	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	170	ug/kg	
87-86-5	Pentachlorophenol	ND	1000	170	ug/kg	
108-95-2	Phenol	ND	210	34	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	27	ug/kg	
83-32-9	Acenaphthene	42.5	210	25	ug/kg	J
208-96-8	Acenaphthylene	ND	210	24	ug/kg	
62-53-3	Aniline	ND	210	67	ug/kg	
120-12-7	Anthracene	71.6	210	21	ug/kg	J
92-87-5	Benzidine	ND	2100	490	ug/kg	
56-55-3	Benzo(a)anthracene	170	210	21	ug/kg	J
50-32-8	Benzo(a)pyrene	68.9	210	21	ug/kg	J
205-99-2	Benzo(b)fluoranthene	109	210	21	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	34.3	210	21	ug/kg	J
207-08-9	Benzo(k)fluoranthene	84.8	210	25	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	210	27	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	210	42	ug/kg	
100-51-6	Benzyl Alcohol	ND	210	42	ug/kg	
91-58-7	2-Chloronaphthalene	ND	210	27	ug/kg	
106-47-8	4-Chloroaniline	ND	210	32	ug/kg	
86-74-8	Carbazole	ND	210	23	ug/kg	
218-01-9	Chrysene	180	210	21	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28		
Lab Sample ID:	FA9376-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	79.9
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	210	29	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	24	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	21	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	22	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	22	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	25	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	210	35	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	210	21	ug/kg	
132-64-9	Dibenzofuran	ND	210	21	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	420	42	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	210	42	ug/kg	
84-66-2	Diethyl phthalate	ND	420	42	ug/kg	
131-11-3	Dimethyl phthalate	ND	210	42	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	420	42	ug/kg	
206-44-0	Fluoranthene	458	210	21	ug/kg	
86-73-7	Fluorene	ND	210	23	ug/kg	
118-74-1	Hexachlorobenzene	ND	210	21	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	23	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	29	ug/kg	
67-72-1	Hexachloroethane	ND	210	24	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	34.9	210	21	ug/kg	J
78-59-1	Isophorone	ND	210	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	210	28	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	24	ug/kg	
88-74-4	2-Nitroaniline	ND	210	31	ug/kg	
99-09-2	3-Nitroaniline	ND	210	29	ug/kg	
100-01-6	4-Nitroaniline	ND	210	45	ug/kg	
91-20-3	Naphthalene	ND	210	21	ug/kg	
98-95-3	Nitrobenzene	ND	210	30	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	420	30	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	23	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	42	ug/kg	
85-01-8	Phenanthrene	ND	210	21	ug/kg	
129-00-0	Pyrene	425	210	21	ug/kg	
110-86-1	Pyridine	ND	420	48	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	22	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28		
Lab Sample ID:	FA9376-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	79.9
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		40-102%
4165-62-2	Phenol-d5	68%		41-100%
118-79-6	2,4,6-Tribromophenol	82%		42-108%
4165-60-0	Nitrobenzene-d5	71%		40-105%
321-60-8	2-Fluorobiphenyl	77%		43-107%
1718-51-0	Terphenyl-d14	88%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28		
Lab Sample ID:	FA9376-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8015C	**Percent Solids:**	79.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124719.D	10	10/31/13	CP	n/a	n/a	GCD5090
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.46 g	5.0 ml	10.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	3890	550	270	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	131%		56-149%
98-08-8	aaa-Trifluorotoluene	173% [a]		66-132%
98-08-8	aaa-Trifluorotoluene	104% [b]		66-132%

(a) Outside control limits due to matrix interference.
(b) Result reported from PID.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28		
Lab Sample ID:	FA9376-1	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	79.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38958.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433
Run #2							

	Initial Weight	Final Volume
Run #1	29.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	7.18	10	4.2	mg/kg	J
	TPH (> C22-C36)	4.63	10	4.2	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28-A		
Lab Sample ID:	FA9376-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	79.1
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0083005.D	1	10/26/13	EP	n/a	n/a	VH3125
Run #2							

	Initial Weight	Methanol Aliquot
Run #1	7.85 g	100 ul
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2700	1100	ug/kg	
107-02-8	Acrolein	ND	1300	460	ug/kg	
107-13-1	Acrylonitrile	ND	1300	530	ug/kg	
71-43-2	Benzene	64.4	270	53	ug/kg	J
108-86-1	Bromobenzene	ND	270	58	ug/kg	
74-97-5	Bromochloromethane	ND	270	75	ug/kg	
75-27-4	Bromodichloromethane	ND	270	75	ug/kg	
75-25-2	Bromoform	ND	270	53	ug/kg	
104-51-8	n-Butylbenzene	ND	270	69	ug/kg	
135-98-8	sec-Butylbenzene	1880	270	65	ug/kg	
98-06-6	tert-Butylbenzene	1880	270	64	ug/kg	
108-90-7	Chlorobenzene	ND	270	53	ug/kg	
75-00-3	Chloroethane	ND	270	110	ug/kg	
67-66-3	Chloroform	ND	270	53	ug/kg	
95-49-8	o-Chlorotoluene	ND	270	53	ug/kg	
106-43-4	p-Chlorotoluene	ND	270	61	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	1300	530	ug/kg	
75-15-0	Carbon disulfide	ND	270	110	ug/kg	
56-23-5	Carbon tetrachloride	ND	270	61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	270	53	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	270	65	ug/kg	
563-58-6	1,1-Dichloropropene	ND	270	53	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	270	130	ug/kg	
106-93-4	1,2-Dibromoethane	ND	270	53	ug/kg	
107-06-2	1,2-Dichloroethane	ND	270	64	ug/kg	
78-87-5	1,2-Dichloropropane	ND	270	53	ug/kg	
142-28-9	1,3-Dichloropropane	ND	270	53	ug/kg	
594-20-7	2,2-Dichloropropane	ND	270	53	ug/kg	
124-48-1	Dibromochloromethane	ND	270	53	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	270	53	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	270	53	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	270	53	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28-A		
Lab Sample ID:	FA9376-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	79.1
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	270	53	ug/kg	
95-50-1	o-Dichlorobenzene	ND	270	58	ug/kg	
106-46-7	p-Dichlorobenzene	ND	270	70	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	270	53	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	270	53	ug/kg	
100-41-4	Ethylbenzene	ND	270	59	ug/kg	
591-78-6	2-Hexanone	ND	1300	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	110	ug/kg	
110-54-3	Hexane	ND	270	120	ug/kg	
98-82-8	Isopropylbenzene	8870	270	71	ug/kg	
99-87-6	p-Isopropyltoluene	ND	270	70	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1300	270	ug/kg	
74-83-9	Methyl bromide	ND	270	110	ug/kg	
74-87-3	Methyl chloride	ND	270	110	ug/kg	
74-95-3	Methylene bromide	ND	270	56	ug/kg	
75-09-2	Methylene chloride	ND	530	240	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1300	270	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	270	53	ug/kg	
91-20-3	Naphthalene	ND	270	110	ug/kg	
103-65-1	n-Propylbenzene	ND	270	55	ug/kg	
100-42-5	Styrene	ND	270	53	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	270	57	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	270	53	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	270	53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	270	53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	270	56	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	270	86	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	63	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	270	58	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	270	56	ug/kg	
127-18-4	Tetrachloroethylene	ND	270	61	ug/kg	
108-88-3	Toluene	ND	270	53	ug/kg	
79-01-6	Trichloroethylene	ND	270	53	ug/kg	
75-69-4	Trichlorofluoromethane	ND	270	110	ug/kg	
75-01-4	Vinyl chloride	ND	270	53	ug/kg	
108-05-4	Vinyl Acetate	ND	1300	220	ug/kg	
	m,p-Xylene	ND	530	110	ug/kg	
95-47-6	o-Xylene	ND	270	53	ug/kg	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28-A		
Lab Sample ID:	FA9376-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	79.1
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	79%		75-124%
2037-26-5	Toluene-D8	87%		75-126%
460-00-4	4-Bromofluorobenzene	91%		71-133%
17060-07-0	1,2-Dichloroethane-D4	82%		72-135%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28-A		
Lab Sample ID:	FA9376-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	79.1
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L066565.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1000	210	ug/kg	
95-57-8	2-Chlorophenol	ND	210	24	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	23	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	30	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	210	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	410	83	ug/kg	
95-48-7	2-Methylphenol	ND	210	26	ug/kg	
	3&4-Methylphenol	ND	210	43	ug/kg	
88-75-5	2-Nitrophenol	ND	210	31	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	170	ug/kg	
87-86-5	Pentachlorophenol	ND	1000	170	ug/kg	
108-95-2	Phenol	ND	210	34	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	27	ug/kg	
83-32-9	Acenaphthene	ND	210	25	ug/kg	
208-96-8	Acenaphthylene	ND	210	24	ug/kg	
62-53-3	Aniline	ND	210	66	ug/kg	
120-12-7	Anthracene	ND	210	21	ug/kg	
92-87-5	Benzidine	ND	2100	480	ug/kg	
56-55-3	Benzo(a)anthracene	70.7	210	21	ug/kg	J
50-32-8	Benzo(a)pyrene	30.1	210	21	ug/kg	J
205-99-2	Benzo(b)fluoranthene	51.5	210	21	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	210	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	35.0	210	25	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	210	26	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	210	41	ug/kg	
100-51-6	Benzyl Alcohol	ND	210	41	ug/kg	
91-58-7	2-Chloronaphthalene	ND	210	27	ug/kg	
106-47-8	4-Chloroaniline	ND	210	31	ug/kg	
86-74-8	Carbazole	ND	210	23	ug/kg	
218-01-9	Chrysene	80.1	210	21	ug/kg	J

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28-A		
Lab Sample ID:	FA9376-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	79.1
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	210	29	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	24	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	21	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	22	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	22	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	25	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	210	35	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	210	21	ug/kg	
132-64-9	Dibenzofuran	ND	210	21	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	410	41	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	210	41	ug/kg	
84-66-2	Diethyl phthalate	ND	410	41	ug/kg	
131-11-3	Dimethyl phthalate	ND	210	41	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	410	41	ug/kg	
206-44-0	Fluoranthene	186	210	21	ug/kg	J
86-73-7	Fluorene	ND	210	23	ug/kg	
118-74-1	Hexachlorobenzene	ND	210	21	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	23	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	29	ug/kg	
67-72-1	Hexachloroethane	ND	210	23	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	210	21	ug/kg	
78-59-1	Isophorone	ND	210	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	210	28	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	24	ug/kg	
88-74-4	2-Nitroaniline	ND	210	31	ug/kg	
99-09-2	3-Nitroaniline	ND	210	29	ug/kg	
100-01-6	4-Nitroaniline	ND	210	44	ug/kg	
91-20-3	Naphthalene	ND	210	21	ug/kg	
98-95-3	Nitrobenzene	ND	210	30	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	410	30	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	23	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	41	ug/kg	
85-01-8	Phenanthrene	ND	210	21	ug/kg	
129-00-0	Pyrene	181	210	21	ug/kg	J
110-86-1	Pyridine	ND	410	48	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	22	ug/kg	

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28-A		
Lab Sample ID:	FA9376-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	79.1
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	63%		40-102%
4165-62-2	Phenol-d5	63%		41-100%
118-79-6	2,4,6-Tribromophenol	75%		42-108%
4165-60-0	Nitrobenzene-d5	68%		40-105%
321-60-8	2-Fluorobiphenyl	72%		43-107%
1718-51-0	Terphenyl-d14	82%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28-A		
Lab Sample ID:	FA9376-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8015C	**Percent Solids:**	79.1
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124736.D	10	11/01/13	CP	n/a	n/a	GCD5091
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.85 g	5.0 ml	25.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1320	210	110	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	143%		56-149%
98-08-8	aaa-Trifluorotoluene	151% [a]		66-132%
98-08-8	aaa-Trifluorotoluene	107% [b]		66-132%

(a) Outside control limits due to matrix interference.
(b) Result reported from PID.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB70C-28-A		
Lab Sample ID:	FA9376-2	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	79.1
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38959.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433
Run #2							

	Initial Weight	Final Volume
Run #1	29.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	11	4.2	mg/kg	
	TPH (> C22-C36)	ND	11	4.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	108%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71C-28		
Lab Sample ID:	FA9376-3	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	77.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0083027.D	1	10/28/13	EP	n/a	n/a	VH3126
Run #2							

	Initial Weight
Run #1	7.81 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	43.1	41	16	ug/kg	
107-02-8	Acrolein	ND	21	7.1	ug/kg	
107-13-1	Acrylonitrile	ND	21	8.2	ug/kg	
71-43-2	Benzene	ND	4.1	0.82	ug/kg	
108-86-1	Bromobenzene	ND	4.1	0.89	ug/kg	
74-97-5	Bromochloromethane	ND	4.1	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	4.1	1.2	ug/kg	
75-25-2	Bromoform	ND	4.1	0.82	ug/kg	
104-51-8	n-Butylbenzene	ND	4.1	1.1	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.1	1.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.1	0.98	ug/kg	
108-90-7	Chlorobenzene	ND	4.1	0.82	ug/kg	
75-00-3	Chloroethane	ND	4.1	1.6	ug/kg	
67-66-3	Chloroform	ND	4.1	0.82	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.1	0.82	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.1	0.95	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	21	8.2	ug/kg	
75-15-0	Carbon disulfide	2.7	4.1	1.6	ug/kg	J
56-23-5	Carbon tetrachloride	ND	4.1	0.94	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.1	0.82	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.1	1.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.1	0.82	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.1	2.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.1	0.82	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.1	0.99	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.1	0.82	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.1	0.82	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.1	0.82	ug/kg	
124-48-1	Dibromochloromethane	ND	4.1	0.82	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.1	0.82	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.1	0.82	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.1	0.82	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71C-28		
Lab Sample ID:	FA9376-3	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	77.8
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	4.1	0.82	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.1	0.90	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.1	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.1	0.82	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.1	0.82	ug/kg	
100-41-4	Ethylbenzene	ND	4.1	0.91	ug/kg	
591-78-6	2-Hexanone	ND	21	4.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.1	1.7	ug/kg	
110-54-3	Hexane	ND	4.1	1.9	ug/kg	
98-82-8	Isopropylbenzene	ND	4.1	1.1	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.1	1.1	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	21	4.1	ug/kg	
74-83-9	Methyl bromide	ND	4.1	1.6	ug/kg	
74-87-3	Methyl chloride	ND	4.1	1.7	ug/kg	
74-95-3	Methylene bromide	ND	4.1	0.86	ug/kg	
75-09-2	Methylene chloride	ND	8.2	3.8	ug/kg	
78-93-3	Methyl ethyl ketone	ND	21	4.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.1	0.82	ug/kg	
91-20-3	Naphthalene	ND	4.1	1.6	ug/kg	
103-65-1	n-Propylbenzene	ND	4.1	0.85	ug/kg	
100-42-5	Styrene	ND	4.1	0.82	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.1	0.88	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.1	0.82	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.1	0.82	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.1	0.82	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.1	0.86	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.1	1.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.1	0.97	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.1	0.89	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.1	0.86	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.1	0.95	ug/kg	
108-88-3	Toluene	ND	4.1	0.82	ug/kg	
79-01-6	Trichloroethylene	ND	4.1	0.82	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.1	1.6	ug/kg	
75-01-4	Vinyl chloride [a]	ND	4.1	0.82	ug/kg	
108-05-4	Vinyl Acetate	ND	21	3.4	ug/kg	
	m,p-Xylene	ND	8.2	1.7	ug/kg	
95-47-6	o-Xylene	ND	4.1	0.82	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71C-28		
Lab Sample ID:	FA9376-3	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	77.8
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		75-124%
2037-26-5	Toluene-D8	85%		75-126%
460-00-4	4-Bromofluorobenzene	91%		71-133%
17060-07-0	1,2-Dichloroethane-D4	95%		72-135%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71C-28		
Lab Sample ID:	FA9376-3	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	77.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L066586.D	1	11/05/13	NAF	10/31/13	OP49247	SL3346
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1100	210	ug/kg	
95-57-8	2-Chlorophenol	ND	210	25	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	24	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	31	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	210	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	430	85	ug/kg	
95-48-7	2-Methylphenol	ND	210	27	ug/kg	
	3&4-Methylphenol	ND	210	44	ug/kg	
88-75-5	2-Nitrophenol	ND	210	32	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	170	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	170	ug/kg	
108-95-2	Phenol	ND	210	35	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	27	ug/kg	
83-32-9	Acenaphthene	ND	210	25	ug/kg	
208-96-8	Acenaphthylene	ND	210	25	ug/kg	
62-53-3	Aniline	ND	210	68	ug/kg	
120-12-7	Anthracene	ND	210	21	ug/kg	
92-87-5	Benzidine	ND	2100	500	ug/kg	
56-55-3	Benzo(a)anthracene	29.3	210	21	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	210	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	210	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	210	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	210	25	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	210	27	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	210	43	ug/kg	
100-51-6	Benzyl Alcohol	ND	210	43	ug/kg	
91-58-7	2-Chloronaphthalene	ND	210	28	ug/kg	
106-47-8	4-Chloroaniline	ND	210	32	ug/kg	
86-74-8	Carbazole	ND	210	24	ug/kg	
218-01-9	Chrysene	27.0	210	21	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71C-28		
Lab Sample ID:	FA9376-3	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	77.8
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	210	30	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	29	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	24	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	21	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	24	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	23	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	22	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	26	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	210	36	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	210	21	ug/kg	
132-64-9	Dibenzofuran	ND	210	22	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	430	43	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	210	43	ug/kg	
84-66-2	Diethyl phthalate	ND	430	43	ug/kg	
131-11-3	Dimethyl phthalate	ND	210	43	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	430	43	ug/kg	
206-44-0	Fluoranthene	61.2	210	21	ug/kg	J
86-73-7	Fluorene	ND	210	24	ug/kg	
118-74-1	Hexachlorobenzene	ND	210	21	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	23	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	29	ug/kg	
67-72-1	Hexachloroethane	ND	210	24	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	210	21	ug/kg	
78-59-1	Isophorone	ND	210	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	210	29	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	25	ug/kg	
88-74-4	2-Nitroaniline	ND	210	31	ug/kg	
99-09-2	3-Nitroaniline	ND	210	30	ug/kg	
100-01-6	4-Nitroaniline	ND	210	46	ug/kg	
91-20-3	Naphthalene	ND	210	22	ug/kg	
98-95-3	Nitrobenzene	ND	210	31	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	430	30	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	23	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	43	ug/kg	
85-01-8	Phenanthrene	ND	210	21	ug/kg	
129-00-0	Pyrene	48.5	210	21	ug/kg	J
110-86-1	Pyridine	ND	430	49	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	23	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71C-28		
Lab Sample ID:	FA9376-3	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	77.8
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	59%		40-102%
4165-62-2	Phenol-d5	61%		41-100%
118-79-6	2,4,6-Tribromophenol	64%		42-108%
4165-60-0	Nitrobenzene-d5	59%		40-105%
321-60-8	2-Fluorobiphenyl	62%		43-107%
1718-51-0	Terphenyl-d14	70%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71C-28		
Lab Sample ID:	FA9376-3	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8015C	**Percent Solids:**	77.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124722.D	1	10/31/13	CP	n/a	n/a	GCD5090
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.99 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	5.04	5.4	2.7	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		56-149%
98-08-8	aaa-Trifluorotoluene	94%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB71C-28		
Lab Sample ID:	FA9376-3	**Date Sampled:**	10/22/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	77.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38960.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	11	4.3	mg/kg	
	TPH (> C22-C36)	ND	11	4.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	117%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72C-29		
Lab Sample ID:	FA9376-4	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	78.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0083007.D	1	10/26/13	EP	n/a	n/a	VH3125
Run #2							

	Initial Weight	Methanol Aliquot
Run #1	6.54 g	100 ul
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	3200	1300	ug/kg	
107-02-8	Acrolein	ND	1600	550	ug/kg	
107-13-1	Acrylonitrile	ND	1600	630	ug/kg	
71-43-2	Benzene	ND	320	63	ug/kg	
108-86-1	Bromobenzene	ND	320	68	ug/kg	
74-97-5	Bromochloromethane	ND	320	88	ug/kg	
75-27-4	Bromodichloromethane	ND	320	89	ug/kg	
75-25-2	Bromoform	ND	320	63	ug/kg	
104-51-8	n-Butylbenzene	ND	320	81	ug/kg	
135-98-8	sec-Butylbenzene	104	320	76	ug/kg	J
98-06-6	tert-Butylbenzene	150	320	75	ug/kg	J
108-90-7	Chlorobenzene	ND	320	63	ug/kg	
75-00-3	Chloroethane	ND	320	130	ug/kg	
67-66-3	Chloroform	ND	320	63	ug/kg	
95-49-8	o-Chlorotoluene	ND	320	63	ug/kg	
106-43-4	p-Chlorotoluene	ND	320	73	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	1600	630	ug/kg	
75-15-0	Carbon disulfide	ND	320	130	ug/kg	
56-23-5	Carbon tetrachloride	ND	320	72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	320	63	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	320	77	ug/kg	
563-58-6	1,1-Dichloropropene	ND	320	63	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	320	160	ug/kg	
106-93-4	1,2-Dibromoethane	ND	320	63	ug/kg	
107-06-2	1,2-Dichloroethane	ND	320	76	ug/kg	
78-87-5	1,2-Dichloropropane	ND	320	63	ug/kg	
142-28-9	1,3-Dichloropropane	ND	320	63	ug/kg	
594-20-7	2,2-Dichloropropane	ND	320	63	ug/kg	
124-48-1	Dibromochloromethane	ND	320	63	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	320	63	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	320	63	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	320	63	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72C-29		
Lab Sample ID:	FA9376-4	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	78.0
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	320	63	ug/kg	
95-50-1	o-Dichlorobenzene	ND	320	69	ug/kg	
106-46-7	p-Dichlorobenzene	ND	320	83	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	320	63	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	320	63	ug/kg	
100-41-4	Ethylbenzene	ND	320	69	ug/kg	
591-78-6	2-Hexanone	ND	1600	320	ug/kg	
87-68-3	Hexachlorobutadiene	ND	320	130	ug/kg	
110-54-3	Hexane	ND	320	140	ug/kg	
98-82-8	Isopropylbenzene	654	320	83	ug/kg	
99-87-6	p-Isopropyltoluene	ND	320	83	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1600	320	ug/kg	
74-83-9	Methyl bromide	ND	320	130	ug/kg	
74-87-3	Methyl chloride	ND	320	130	ug/kg	
74-95-3	Methylene bromide	ND	320	66	ug/kg	
75-09-2	Methylene chloride	ND	630	290	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1600	320	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	320	63	ug/kg	
91-20-3	Naphthalene	ND	320	130	ug/kg	
103-65-1	n-Propylbenzene	ND	320	65	ug/kg	
100-42-5	Styrene	ND	320	63	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	320	68	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	320	63	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	320	63	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	320	63	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	320	66	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	320	100	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	320	74	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	320	68	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	320	66	ug/kg	
127-18-4	Tetrachloroethylene	ND	320	73	ug/kg	
108-88-3	Toluene	ND	320	63	ug/kg	
79-01-6	Trichloroethylene	ND	320	63	ug/kg	
75-69-4	Trichlorofluoromethane	ND	320	130	ug/kg	
75-01-4	Vinyl chloride	ND	320	63	ug/kg	
108-05-4	Vinyl Acetate	ND	1600	260	ug/kg	
	m,p-Xylene	ND	630	130	ug/kg	
95-47-6	o-Xylene	ND	320	63	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72C-29		
Lab Sample ID:	FA9376-4	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	78.0
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		75-124%
2037-26-5	Toluene-D8	88%		75-126%
460-00-4	4-Bromofluorobenzene	92%		71-133%
17060-07-0	1,2-Dichloroethane-D4	90%		72-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72C-29		
Lab Sample ID:	FA9376-4	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	78.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T010414.D	1	11/07/13	FS	11/01/13	OP49263	ST499
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1100	210	ug/kg	
95-57-8	2-Chlorophenol	ND	210	25	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	24	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	31	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	210	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	420	84	ug/kg	
95-48-7	2-Methylphenol	ND	210	26	ug/kg	
	3&4-Methylphenol	ND	210	44	ug/kg	
88-75-5	2-Nitrophenol	ND	210	32	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	170	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	170	ug/kg	
108-95-2	Phenol	ND	210	34	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	27	ug/kg	
83-32-9	Acenaphthene	ND	210	25	ug/kg	
208-96-8	Acenaphthylene	ND	210	24	ug/kg	
62-53-3	Aniline	ND	210	67	ug/kg	
120-12-7	Anthracene	ND	210	21	ug/kg	
92-87-5	Benzidine	ND	2100	490	ug/kg	
56-55-3	Benzo(a)anthracene	ND	210	21	ug/kg	
50-32-8	Benzo(a)pyrene	ND	210	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	210	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	210	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	210	25	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	210	27	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	210	42	ug/kg	
100-51-6	Benzyl Alcohol	ND	210	42	ug/kg	
91-58-7	2-Chloronaphthalene	ND	210	27	ug/kg	
106-47-8	4-Chloroaniline	ND	210	32	ug/kg	
86-74-8	Carbazole	ND	210	23	ug/kg	
218-01-9	Chrysene	ND	210	21	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72C-29		
Lab Sample ID:	FA9376-4	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	78.0
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	210	30	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	24	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	22	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	21	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	22	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	22	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	25	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	210	35	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	210	21	ug/kg	
132-64-9	Dibenzofuran	ND	210	21	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	420	42	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	210	42	ug/kg	
84-66-2	Diethyl phthalate	ND	420	42	ug/kg	
131-11-3	Dimethyl phthalate	ND	210	42	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	420	42	ug/kg	
206-44-0	Fluoranthene	ND	210	21	ug/kg	
86-73-7	Fluorene	ND	210	23	ug/kg	
118-74-1	Hexachlorobenzene	ND	210	21	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	23	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	29	ug/kg	
67-72-1	Hexachloroethane	ND	210	24	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	210	21	ug/kg	
78-59-1	Isophorone	ND	210	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	210	29	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	24	ug/kg	
88-74-4	2-Nitroaniline	ND	210	31	ug/kg	
99-09-2	3-Nitroaniline	ND	210	30	ug/kg	
100-01-6	4-Nitroaniline	ND	210	45	ug/kg	
91-20-3	Naphthalene	ND	210	21	ug/kg	
98-95-3	Nitrobenzene	ND	210	31	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	420	30	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	23	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	42	ug/kg	
85-01-8	Phenanthrene	ND	210	21	ug/kg	
129-00-0	Pyrene	ND	210	21	ug/kg	
110-86-1	Pyridine	ND	420	48	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	23	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72C-29		
Lab Sample ID:	FA9376-4	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	78.0
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	76%		40-102%
4165-62-2	Phenol-d5	90%		41-100%
118-79-6	2,4,6-Tribromophenol	81%		42-108%
4165-60-0	Nitrobenzene-d5	74%		40-105%
321-60-8	2-Fluorobiphenyl	80%		43-107%
1718-51-0	Terphenyl-d14	95%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72C-29		
Lab Sample ID:	FA9376-4	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8015C	**Percent Solids:**	78.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR079770.D	1	11/04/13	MM	n/a	n/a	GQR3397
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.35 g	5.0 ml	10.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	156	65	32	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	136%		56-149%
98-08-8	aaa-Trifluorotoluene	114%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB72C-29		
Lab Sample ID:	FA9376-4	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	78.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38961.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	11	4.3	mg/kg	
	TPH (> C22-C36)	ND	11	4.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73C-27		
Lab Sample ID:	FA9376-5	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	80.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0083008.D	1	10/26/13	EP	n/a	n/a	VH3125
Run #2	H0083028.D	1	10/28/13	EP	n/a	n/a	VH3126

	Initial Weight	Methanol Aliquot
Run #1	7.21 g	100 ul
Run #2	7.21 g	10.0 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2700	1100	ug/kg	
107-02-8	Acrolein	ND	1400	470	ug/kg	
107-13-1	Acrylonitrile	ND	1400	550	ug/kg	
71-43-2	Benzene	8800	270	55	ug/kg	
108-86-1	Bromobenzene	ND	270	59	ug/kg	
74-97-5	Bromochloromethane	ND	270	77	ug/kg	
75-27-4	Bromodichloromethane	ND	270	77	ug/kg	
75-25-2	Bromoform	ND	270	55	ug/kg	
104-51-8	n-Butylbenzene	148	270	71	ug/kg	J
135-98-8	sec-Butylbenzene	2510	270	66	ug/kg	
98-06-6	tert-Butylbenzene	901	270	65	ug/kg	
108-90-7	Chlorobenzene	ND	270	55	ug/kg	
75-00-3	Chloroethane	ND	270	110	ug/kg	
67-66-3	Chloroform	ND	270	55	ug/kg	
95-49-8	o-Chlorotoluene	ND	270	55	ug/kg	
106-43-4	p-Chlorotoluene	ND	270	63	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	1400	550	ug/kg	
75-15-0	Carbon disulfide	ND	270	110	ug/kg	
56-23-5	Carbon tetrachloride	ND	270	62	ug/kg	
75-34-3	1,1-Dichloroethane	ND	270	55	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	270	67	ug/kg	
563-58-6	1,1-Dichloropropene	ND	270	55	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	270	140	ug/kg	
106-93-4	1,2-Dibromoethane	ND	270	55	ug/kg	
107-06-2	1,2-Dichloroethane	ND	270	66	ug/kg	
78-87-5	1,2-Dichloropropane	ND	270	55	ug/kg	
142-28-9	1,3-Dichloropropane	ND	270	55	ug/kg	
594-20-7	2,2-Dichloropropane	ND	270	55	ug/kg	
124-48-1	Dibromochloromethane	ND	270	55	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	270	55	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	270	55	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	270	55	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73C-27		
Lab Sample ID:	FA9376-5	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	80.9
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	270	55	ug/kg	
95-50-1	o-Dichlorobenzene	ND	270	60	ug/kg	
106-46-7	p-Dichlorobenzene	ND	270	72	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	270	55	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	270	55	ug/kg	
100-41-4	Ethylbenzene	24700 [a]	2700	600	ug/kg	
591-78-6	2-Hexanone	ND	1400	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	110	ug/kg	
110-54-3	Hexane	127	270	120	ug/kg	J
98-82-8	Isopropylbenzene	109000 [a]	2700	720	ug/kg	
99-87-6	p-Isopropyltoluene	87.6	270	72	ug/kg	J
108-10-1	4-Methyl-2-pentanone	ND	1400	270	ug/kg	
74-83-9	Methyl bromide	ND	270	110	ug/kg	
74-87-3	Methyl chloride	ND	270	110	ug/kg	
74-95-3	Methylene bromide	ND	270	57	ug/kg	
75-09-2	Methylene chloride	ND	550	250	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1400	270	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	270	55	ug/kg	
91-20-3	Naphthalene	ND	270	110	ug/kg	
103-65-1	n-Propylbenzene	4470	270	56	ug/kg	
100-42-5	Styrene	ND	270	55	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	270	58	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	270	55	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	270	55	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	270	55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	270	57	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	270	88	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	65	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	24700 [a]	2700	590	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	270	57	ug/kg	
127-18-4	Tetrachloroethylene	ND	270	63	ug/kg	
108-88-3	Toluene	182	270	55	ug/kg	J
79-01-6	Trichloroethylene	ND	270	55	ug/kg	
75-69-4	Trichlorofluoromethane	ND	270	110	ug/kg	
75-01-4	Vinyl chloride	ND	270	55	ug/kg	
108-05-4	Vinyl Acetate	ND	1400	230	ug/kg	
	m,p-Xylene	17600	550	110	ug/kg	
95-47-6	o-Xylene	449	270	55	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73C-27		
Lab Sample ID:	FA9376-5	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	80.9
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	77%	87%	75-124%
2037-26-5	Toluene-D8	88%	88%	75-126%
460-00-4	4-Bromofluorobenzene	93%	93%	71-133%
17060-07-0	1,2-Dichloroethane-D4	100%	87%	72-135%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73C-27		
Lab Sample ID:	FA9376-5	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	80.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T010415.D	1	11/07/13	FS	11/01/13	OP49263	ST499
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1000	200	ug/kg	
95-57-8	2-Chlorophenol	ND	200	24	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	23	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	30	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	200	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	410	82	ug/kg	
95-48-7	2-Methylphenol	ND	200	26	ug/kg	
	3&4-Methylphenol	ND	200	43	ug/kg	
88-75-5	2-Nitrophenol	ND	200	31	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	160	ug/kg	
87-86-5	Pentachlorophenol	ND	1000	160	ug/kg	
108-95-2	Phenol	83.9	200	33	ug/kg	J
95-95-4	2,4,5-Trichlorophenol	ND	200	24	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	26	ug/kg	
83-32-9	Acenaphthene	ND	200	24	ug/kg	
208-96-8	Acenaphthylene	ND	200	24	ug/kg	
62-53-3	Aniline	ND	200	65	ug/kg	
120-12-7	Anthracene	ND	200	20	ug/kg	
92-87-5	Benzidine	ND	2000	480	ug/kg	
56-55-3	Benzo(a)anthracene	36.9	200	20	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	200	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	22.8	200	20	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	200	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	200	24	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	26	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	200	41	ug/kg	
100-51-6	Benzyl Alcohol	ND	200	41	ug/kg	
91-58-7	2-Chloronaphthalene	ND	200	27	ug/kg	
106-47-8	4-Chloroaniline	ND	200	31	ug/kg	
86-74-8	Carbazole	ND	200	23	ug/kg	
218-01-9	Chrysene	36.4	200	20	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73C-27		
Lab Sample ID:	FA9376-5	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	80.9
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	200	29	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	200	23	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	200	21	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	200	23	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	200	27	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	200	22	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	200	21	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	200	25	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	200	34	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	200	20	ug/kg	
132-64-9	Dibenzofuran	ND	200	21	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	410	41	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	200	41	ug/kg	
84-66-2	Diethyl phthalate	ND	410	41	ug/kg	
131-11-3	Dimethyl phthalate	ND	200	41	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	410	41	ug/kg	
206-44-0	Fluoranthene	83.3	200	20	ug/kg	J
86-73-7	Fluorene	ND	200	23	ug/kg	
118-74-1	Hexachlorobenzene	ND	200	20	ug/kg	
87-68-3	Hexachlorobutadiene	ND	200	22	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	200	28	ug/kg	
67-72-1	Hexachloroethane	ND	200	23	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	200	20	ug/kg	
78-59-1	Isophorone	ND	200	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	200	28	ug/kg	
91-57-6	2-Methylnaphthalene	ND	200	24	ug/kg	
88-74-4	2-Nitroaniline	ND	200	30	ug/kg	
99-09-2	3-Nitroaniline	ND	200	29	ug/kg	
100-01-6	4-Nitroaniline	ND	200	44	ug/kg	
91-20-3	Naphthalene	ND	200	21	ug/kg	
98-95-3	Nitrobenzene	ND	200	30	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	410	29	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	200	22	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	41	ug/kg	
85-01-8	Phenanthrene	60.0	200	20	ug/kg	J
129-00-0	Pyrene	66.4	200	20	ug/kg	J
110-86-1	Pyridine	ND	410	47	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	200	22	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73C-27		
Lab Sample ID:	FA9376-5	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	80.9
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	63%		40-102%
4165-62-2	Phenol-d5	73%		41-100%
118-79-6	2,4,6-Tribromophenol	67%		42-108%
4165-60-0	Nitrobenzene-d5	62%		40-105%
321-60-8	2-Fluorobiphenyl	66%		43-107%
1718-51-0	Terphenyl-d14	80%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73C-27		
Lab Sample ID:	FA9376-5	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8015C	**Percent Solids:**	80.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124725.D	10	10/31/13	CP	n/a	n/a	GCD5090
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.21 g	5.0 ml	25.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1400	220	110	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	110%		56-149%
98-08-8	aaa-Trifluorotoluene	132%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB73C-27		
Lab Sample ID:	FA9376-5	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/24/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	80.9
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38962.D	1	11/06/13	SJL	11/04/13	OP49288	GYY1433
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	7.77	10	4.1	mg/kg	J
	TPH (> C22-C36)	4.69	10	4.1	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	112%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9376-6	**Date Sampled:**	10/22/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0083009.D	1	10/26/13	EP	n/a	n/a	VH3125
Run #2							

	Initial Weight
Run #1	5.00 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9376-6	**Date Sampled:**	10/22/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9376-6	**Date Sampled:**	10/22/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	10/24/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		75-124%
2037-26-5	Toluene-D8	92%		75-126%
460-00-4	4-Bromofluorobenzene	93%		71-133%
17060-07-0	1,2-Dichloroethane-D4	91%		72-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA9376

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 10232013-05
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (Soil - Semiannual # 3, Oct 2013)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zack Beck

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO							Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
SS61-SB70C-28	SS61-SB70	10/22/13	1340	27-28	N	1	SO	5	X	X	X	X									1	5
SS61-SB70C-28-A	SS61-SB70	10/22/13	1340	27-28	FD	1	SO	5	X	X	X	X									2	5
SS61-SB71C-28	SS61-SB71	10/22/13	1505	27-28	N	1	SO	5	X	X	X	X									3	5
SS61-SB72C-29	SS61-SB72	10/23/13	0920	28 29	N	1	SO	5	X	X	X	X									4	5
SS61-SB73C-27	SS61-SB73	10/23/13	1055	26 27	N	1	SO	5	X	X	X	X									5	5
TRIP BLANK				-	TB	1	SQ	3	X												6	5
				-																		
				-																		
				-																		
				-																		
				-																		

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

COMMENTS:

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/23/13	1400	1. [signature]		
2. [signature]	10-24-13	1000	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest Labs
Lab Recipient:
Shipped No.:
Airbill Number: 7969 7787 0547
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

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FA9376: Chain of Custody
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ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA9376 CLIENT: B Hate PROJECT: SS-61

DATE/TIME RECEIVED: 10-24-13 1000 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7969 7787 0823

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [x] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____

NUMBER OF 5035 FIELD KITS ? 5

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.2
- [ ] CORRECTED TEMPS: 2.6

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE [signature] 10-24-13 REVIEWER SIGNATURE/DATE [signature] 10/24/13

NF 12/10

receipt confirmation 122910.xls

5.1

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FA9376: Chain of Custody

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Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3125-MB	H0082995.D	1	10/26/13	EP	n/a	n/a	VH3125

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-2, FA9376-4, FA9376-5, FA9376-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3125-MB	H0082995.D	1	10/26/13	EP	n/a	n/a	VH3125

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-2, FA9376-4, FA9376-5, FA9376-6

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3125-MB	H0082995.D	1	10/26/13	EP	n/a	n/a	VH3125

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-2, FA9376-4, FA9376-5, FA9376-6

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	91%	75-124%
2037-26-5	Toluene-D8	87%	75-126%
460-00-4	4-Bromofluorobenzene	88%	71-133%
17060-07-0	1,2-Dichloroethane-D4	95%	72-135%

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-MB	H0083024.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-3, FA9376-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-MB	H0083024.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-3, FA9376-5

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-MB	H0083024.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-3, FA9376-5

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	90%	75-124%
2037-26-5	Toluene-D8	87%	75-126%
460-00-4	4-Bromofluorobenzene	89%	71-133%
17060-07-0	1,2-Dichloroethane-D4	93%	72-135%

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3125-BS	H0082994.D	1	10/26/13	EP	n/a	n/a	VH3125

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-2, FA9376-4, FA9376-5, FA9376-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	318	127	61-152
107-02-8	Acrolein	250	256	102	48-178
107-13-1	Acrylonitrile	250	279	112	66-134
71-43-2	Benzene	50	56.6	113	76-126
108-86-1	Bromobenzene	50	55.2	110	76-122
74-97-5	Bromochloromethane	50	54.0	108	77-120
75-27-4	Bromodichloromethane	50	58.7	117	74-130
75-25-2	Bromoform	50	56.9	114	76-127
104-51-8	n-Butylbenzene	50	49.2	98	71-128
135-98-8	sec-Butylbenzene	50	56.2	112	79-135
98-06-6	tert-Butylbenzene	50	52.9	106	77-133
108-90-7	Chlorobenzene	50	59.4	119	81-129
75-00-3	Chloroethane	50	53.5	107	68-133
67-66-3	Chloroform	50	54.5	109	72-123
95-49-8	o-Chlorotoluene	50	59.0	118	77-129
106-43-4	p-Chlorotoluene	50	63.4	127	80-134
110-75-8	2-Chloroethyl vinyl ether	250	223	89	45-159
75-15-0	Carbon disulfide	50	51.1	102	72-122
56-23-5	Carbon tetrachloride	50	63.5	127	78-133
75-34-3	1,1-Dichloroethane	50	56.3	113	73-125
75-35-4	1,1-Dichloroethylene	50	59.1	118	81-136
563-58-6	1,1-Dichloropropene	50	52.6	105	75-130
96-12-8	1,2-Dibromo-3-chloropropane	50	57.7	115	70-137
106-93-4	1,2-Dibromoethane	50	57.9	116	77-126
107-06-2	1,2-Dichloroethane	50	57.9	116	74-128
78-87-5	1,2-Dichloropropane	50	57.1	114	74-125
142-28-9	1,3-Dichloropropane	50	57.5	115	76-122
594-20-7	2,2-Dichloropropane	50	58.4	117	77-133
124-48-1	Dibromochloromethane	50	51.5	103	76-127
75-71-8	Dichlorodifluoromethane	50	45.2	90	68-168
156-59-2	cis-1,2-Dichloroethylene	50	58.5	117	74-126
10061-01-5	cis-1,3-Dichloropropene	50	49.0	98	80-123
541-73-1	m-Dichlorobenzene	50	61.9	124	81-129
95-50-1	o-Dichlorobenzene	50	62.3	125	80-129
106-46-7	p-Dichlorobenzene	50	56.6	113	76-130
156-60-5	trans-1,2-Dichloroethylene	50	56.7	113	70-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3125-BS	H0082994.D	1	10/26/13	EP	n/a	n/a	VH3125

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-2, FA9376-4, FA9376-5, FA9376-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	52.6	105	75-131
100-41-4	Ethylbenzene	50	57.5	115	77-123
591-78-6	2-Hexanone	250	253	101	72-133
87-68-3	Hexachlorobutadiene	50	58.8	118	74-136
110-54-3	Hexane	50	55.5	111	72-130
98-82-8	Isopropylbenzene	50	55.1	110	80-136
99-87-6	p-Isopropyltoluene	50	53.9	108	77-131
108-10-1	4-Methyl-2-pentanone	250	290	116	76-132
74-83-9	Methyl bromide	50	59.9	120	65-139
74-87-3	Methyl chloride	50	53.8	108	71-144
74-95-3	Methylene bromide	50	56.5	113	74-124
75-09-2	Methylene chloride	50	58.4	117	74-137
78-93-3	Methyl ethyl ketone	250	307	123	75-137
1634-04-4	Methyl Tert Butyl Ether	50	47.3	95	77-120
91-20-3	Naphthalene	50	50.2	100	79-129
103-65-1	n-Propylbenzene	50	63.9	128	80-135
100-42-5	Styrene	50	50.2	100	78-125
630-20-6	1,1,1,2-Tetrachloroethane	50	60.4	121	78-126
71-55-6	1,1,1-Trichloroethane	50	58.4	117	70-129
79-34-5	1,1,2,2-Tetrachloroethane	50	55.2	110	71-126
79-00-5	1,1,2-Trichloroethane	50	56.1	112	74-124
87-61-6	1,2,3-Trichlorobenzene	50	58.7	117	77-128
96-18-4	1,2,3-Trichloropropane	50	55.0	110	74-127
120-82-1	1,2,4-Trichlorobenzene	50	51.5	103	78-130
95-63-6	1,2,4-Trimethylbenzene	50	58.0	116	74-123
108-67-8	1,3,5-Trimethylbenzene	50	56.2	112	73-122
127-18-4	Tetrachloroethylene	50	55.1	110	79-130
108-88-3	Toluene	50	54.4	109	76-124
79-01-6	Trichloroethylene	50	54.4	109	75-128
75-69-4	Trichlorofluoromethane	50	55.9	112	73-145
75-01-4	Vinyl chloride	50	53.9	108	76-141
108-05-4	Vinyl Acetate	250	269	108	48-164
	m,p-Xylene	100	128	128	80-128
95-47-6	o-Xylene	50	54.3	109	80-132

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3125-BS	H0082994.D	1	10/26/13	EP	n/a	n/a	VH3125

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-2, FA9376-4, FA9376-5, FA9376-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	75-124%
2037-26-5	Toluene-D8	88%	75-126%
460-00-4	4-Bromofluorobenzene	92%	71-133%
17060-07-0	1,2-Dichloroethane-D4	94%	72-135%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-BS	H0083025.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-3, FA9376-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	358	143	61-152
107-02-8	Acrolein	250	224	90	48-178
107-13-1	Acrylonitrile	250	296	118	66-134
71-43-2	Benzene	50	57.1	114	76-126
108-86-1	Bromobenzene	50	54.2	108	76-122
74-97-5	Bromochloromethane	50	54.6	109	77-120
75-27-4	Bromodichloromethane	50	59.3	119	74-130
75-25-2	Bromoform	50	58.5	117	76-127
104-51-8	n-Butylbenzene	50	45.5	91	71-128
135-98-8	sec-Butylbenzene	50	53.3	107	79-135
98-06-6	tert-Butylbenzene	50	50.0	100	77-133
108-90-7	Chlorobenzene	50	59.4	119	81-129
75-00-3	Chloroethane	50	38.4	77	68-133
67-66-3	Chloroform	50	54.7	109	72-123
95-49-8	o-Chlorotoluene	50	56.8	114	77-129
106-43-4	p-Chlorotoluene	50	61.2	122	80-134
110-75-8	2-Chloroethyl vinyl ether	250	237	95	45-159
75-15-0	Carbon disulfide	50	49.9	100	72-122
56-23-5	Carbon tetrachloride	50	63.8	128	78-133
75-34-3	1,1-Dichloroethane	50	57.0	114	73-125
75-35-4	1,1-Dichloroethylene	50	57.3	115	81-136
563-58-6	1,1-Dichloropropene	50	52.3	105	75-130
96-12-8	1,2-Dibromo-3-chloropropane	50	61.2	122	70-137
106-93-4	1,2-Dibromoethane	50	59.5	119	77-126
107-06-2	1,2-Dichloroethane	50	59.6	119	74-128
78-87-5	1,2-Dichloropropane	50	57.4	115	74-125
142-28-9	1,3-Dichloropropane	50	59.7	119	76-122
594-20-7	2,2-Dichloropropane	50	58.5	117	77-133
124-48-1	Dibromochloromethane	50	50.9	102	76-127
75-71-8	Dichlorodifluoromethane	50	42.3	85	68-168
156-59-2	cis-1,2-Dichloroethylene	50	58.1	116	74-126
10061-01-5	cis-1,3-Dichloropropene	50	49.3	99	80-123
541-73-1	m-Dichlorobenzene	50	59.5	119	81-129
95-50-1	o-Dichlorobenzene	50	59.9	120	80-129
106-46-7	p-Dichlorobenzene	50	54.2	108	76-130
156-60-5	trans-1,2-Dichloroethylene	50	56.7	113	70-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-BS	H0083025.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-3, FA9376-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	53.8	108	75-131
100-41-4	Ethylbenzene	50	56.6	113	77-123
591-78-6	2-Hexanone	250	290	116	72-133
87-68-3	Hexachlorobutadiene	50	52.5	105	74-136
110-54-3	Hexane	50	56.7	113	72-130
98-82-8	Isopropylbenzene	50	53.7	107	80-136
99-87-6	p-Isopropyltoluene	50	51.5	103	77-131
108-10-1	4-Methyl-2-pentanone	250	329	132	76-132
74-83-9	Methyl bromide	50	42.5	85	65-139
74-87-3	Methyl chloride	50	38.7	77	71-144
74-95-3	Methylene bromide	50	58.6	117	74-124
75-09-2	Methylene chloride	50	59.3	119	74-137
78-93-3	Methyl ethyl ketone	250	334	134	75-137
1634-04-4	Methyl Tert Butyl Ether	50	49.1	98	77-120
91-20-3	Naphthalene	50	49.5	99	79-129
103-65-1	n-Propylbenzene	50	55.8	112	80-135
100-42-5	Styrene	50	49.5	99	78-125
630-20-6	1,1,1,2-Tetrachloroethane	50	58.9	118	78-126
71-55-6	1,1,1-Trichloroethane	50	57.7	115	70-129
79-34-5	1,1,2,2-Tetrachloroethane	50	57.6	115	71-126
79-00-5	1,1,2-Trichloroethane	50	56.7	113	74-124
87-61-6	1,2,3-Trichlorobenzene	50	55.1	110	77-128
96-18-4	1,2,3-Trichloropropane	50	58.4	117	74-127
120-82-1	1,2,4-Trichlorobenzene	50	48.3	97	78-130
95-63-6	1,2,4-Trimethylbenzene	50	54.7	109	74-123
108-67-8	1,3,5-Trimethylbenzene	50	53.5	107	73-122
127-18-4	Tetrachloroethylene	50	52.3	105	79-130
108-88-3	Toluene	50	54.2	108	76-124
79-01-6	Trichloroethylene	50	53.2	106	75-128
75-69-4	Trichlorofluoromethane	50	54.6	109	73-145
75-01-4	Vinyl chloride	50	37.0	74* [a]	76-141
108-05-4	Vinyl Acetate	250	307	123	48-164
	m,p-Xylene	100	104	104	80-128
95-47-6	o-Xylene	50	53.9	108	80-132

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-BS	H0083025.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-3, FA9376-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	75-124%
2037-26-5	Toluene-D8	87%	75-126%
460-00-4	4-Bromofluorobenzene	91%	71-133%
17060-07-0	1,2-Dichloroethane-D4	94%	72-135%

(a) Sporadic marginal failure.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9472-8MS	H0083014.D	1	10/26/13	EP	n/a	n/a	VH3125
FA9472-8MSD	H0083015.D	1	10/26/13	EP	n/a	n/a	VH3125
FA9472-8 [a]	H0083013.D	1	10/26/13	EP	n/a	n/a	VH3125

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-2, FA9376-4, FA9376-5, FA9376-6

CAS No.	Compound	FA9472-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		403	357	89	350	89	2	61-152/27
107-02-8	Acrolein	ND		403	158	39*	141	36*	11	48-178/37
107-13-1	Acrylonitrile	ND		403	326	81	301	76	8	66-134/26
71-43-2	Benzene	ND		80.6	75.3	93	70.4	89	7	76-126/26
108-86-1	Bromobenzene	ND		80.6	69.2	86	66.7	84	4	76-122/32
74-97-5	Bromochloromethane	ND		80.6	73.3	91	70.5	89	4	77-120/24
75-27-4	Bromodichloromethane	ND		80.6	78.7	98	73.4	93	7	74-130/25
75-25-2	Bromoform	ND		80.6	69.8	87	65.2	83	7	76-127/26
104-51-8	n-Butylbenzene	ND		80.6	44.8	56*	41.0	52*	9	71-128/35
135-98-8	sec-Butylbenzene	ND		80.6	57.5	71*	52.8	67*	9	79-135/34
98-06-6	tert-Butylbenzene	ND		80.6	59.1	73*	54.7	69*	8	77-133/34
108-90-7	Chlorobenzene	ND		80.6	74.2	92	70.4	89	5	81-129/29
75-00-3	Chloroethane	ND		80.6	77.9	97	68.8	87	12	68-133/29
67-66-3	Chloroform	ND		80.6	74.5	92	69.1	87	8	72-123/26
95-49-8	o-Chlorotoluene	ND		80.6	70.0	87	66.6	84	5	77-129/33
106-43-4	p-Chlorotoluene	ND		80.6	70.9	88	67.2	85	5	80-134/33
110-75-8	2-Chloroethyl vinyl ether	ND		403	154	38*	154	39*	0	45-159/26
75-15-0	Carbon disulfide	ND		80.6	55.1	68*	52.5	66*	5	72-122/29
56-23-5	Carbon tetrachloride	ND		80.6	81.1	101	77.0	97	5	78-133/29
75-34-3	1,1-Dichloroethane	ND		80.6	73.0	91	68.3	86	7	73-125/27
75-35-4	1,1-Dichloroethylene	ND		80.6	71.5	89	66.6	84	7	81-136/28
563-58-6	1,1-Dichloropropene	ND		80.6	62.4	77	59.7	76	4	75-130/28
96-12-8	1,2-Dibromo-3-chloropropane	ND		80.6	64.0	79	58.4	74	9	70-137/29
106-93-4	1,2-Dibromoethane	ND		80.6	70.9	88	68.0	86	4	77-126/26
107-06-2	1,2-Dichloroethane	ND		80.6	77.8	96	71.1	90	9	74-128/23
78-87-5	1,2-Dichloropropane	ND		80.6	75.3	93	71.7	91	5	74-125/25
142-28-9	1,3-Dichloropropane	ND		80.6	71.8	89	69.8	88	3	76-122/26
594-20-7	2,2-Dichloropropane	ND		80.6	67.6	84	65.8	83	3	77-133/28
124-48-1	Dibromochloromethane	ND		80.6	64.9	80	60.5	77	7	76-127/27
75-71-8	Dichlorodifluoromethane	ND		80.6	61.3	76	74.4	94	19	68-168/29
156-59-2	cis-1,2-Dichloroethylene	ND		80.6	76.6	95	71.7	91	7	74-126/26
10061-01-5	cis-1,3-Dichloropropene	ND		80.6	61.7	77*	56.8	72*	8	80-123/26
541-73-1	m-Dichlorobenzene	ND		80.6	68.4	85	63.4	80*	8	81-129/33
95-50-1	o-Dichlorobenzene	ND		80.6	68.3	85	63.0	80	8	80-129/32
106-46-7	p-Dichlorobenzene	ND		80.6	64.0	79	58.3	74*	9	76-130/32
156-60-5	trans-1,2-Dichloroethylene	ND		80.6	72.5	90	68.3	86	6	70-127/27

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9472-8MS	H0083014.D	1	10/26/13	EP	n/a	n/a	VH3125
FA9472-8MSD	H0083015.D	1	10/26/13	EP	n/a	n/a	VH3125
FA9472-8 [a]	H0083013.D	1	10/26/13	EP	n/a	n/a	VH3125

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-2, FA9376-4, FA9376-5, FA9376-6

CAS No.	Compound	FA9472-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		80.6	63.3	78	59.3	75	7	75-131/28
100-41-4	Ethylbenzene	ND		80.6	73.3	91	66.5	84	10	77-123/31
591-78-6	2-Hexanone	ND		403	284	70*	262	66*	8	72-133/26
87-68-3	Hexachlorobutadiene	ND		80.6	41.4	51*	35.3	45*	16	74-136/38
110-54-3	Hexane	ND		80.6	54.3	67*	49.9	63*	8	72-130/32
98-82-8	Isopropylbenzene	ND		80.6	65.5	81	58.9	75*	11	80-136/32
99-87-6	p-Isopropyltoluene	ND		80.6	54.5	68*	50.7	64*	7	77-131/34
108-10-1	4-Methyl-2-pentanone	ND		403	356	88	339	86	5	76-132/26
74-83-9	Methyl bromide	ND		80.6	87.6	109	76.1	96	14	65-139/31
74-87-3	Methyl chloride	ND		80.6	55.4	69*	68.7	87	21	71-144/27
74-95-3	Methylene bromide	ND		80.6	75.1	93	71.7	91	5	74-124/24
75-09-2	Methylene chloride	ND		80.6	78.6	97	80.8	102	3	74-137/28
78-93-3	Methyl ethyl ketone	ND		403	352	87	335	85	5	75-137/25
1634-04-4	Methyl Tert Butyl Ether	ND		80.6	59.4	74*	57.1	72*	4	77-120/24
91-20-3	Naphthalene	ND		80.6	44.6	55*	39.6	50*	12	79-129/33
103-65-1	n-Propylbenzene	ND		80.6	70.1	87	66.4	84	5	80-135/33
100-42-5	Styrene	ND		80.6	62.5	77*	56.5	72*	10	78-125/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		80.6	76.4	95	72.3	92	6	78-126/27
71-55-6	1,1,1-Trichloroethane	ND		80.6	75.0	93	71.8	91	4	70-129/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		80.6	67.9	84	66.0	84	3	71-126/30
79-00-5	1,1,2-Trichloroethane	ND		80.6	70.1	87	67.4	85	4	74-124/28
87-61-6	1,2,3-Trichlorobenzene	ND		80.6	47.9	59*	40.7	52*	16	77-128/35
96-18-4	1,2,3-Trichloropropane	ND		80.6	66.6	83	66.5	84	0	74-127/27
120-82-1	1,2,4-Trichlorobenzene	ND		80.6	42.1	52*	36.4	46*	15	78-130/34
95-63-6	1,2,4-Trimethylbenzene	ND		80.6	66.4	82	60.7	77	9	74-123/34
108-67-8	1,3,5-Trimethylbenzene	ND		80.6	64.4	80	61.2	77	5	73-122/33
127-18-4	Tetrachloroethylene	ND		80.6	60.3	75*	56.8	72*	6	79-130/31
108-88-3	Toluene	ND		80.6	70.9	88	67.6	86	5	76-124/30
79-01-6	Trichloroethylene	ND		80.6	70.5	87	66.3	84	6	75-128/27
75-69-4	Trichlorofluoromethane	ND		80.6	73.7	91	65.3	83	12	73-145/31
75-01-4	Vinyl chloride	ND		80.6	54.2	67*	67.2	85	21	76-141/27
108-05-4	Vinyl Acetate	ND		403	51.3	13*	23.2	6*	75*	48-164/37
	m,p-Xylene	ND		161	159	99	145	92	9	80-128/30
95-47-6	o-Xylene	ND		80.6	66.9	83	62.1	79*	7	80-132/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9472-8MS	H0083014.D	1	10/26/13	EP	n/a	n/a	VH3125
FA9472-8MSD	H0083015.D	1	10/26/13	EP	n/a	n/a	VH3125
FA9472-8 [a]	H0083013.D	1	10/26/13	EP	n/a	n/a	VH3125

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-2, FA9376-4, FA9376-5, FA9376-6

CAS No.	Surrogate Recoveries	MS	MSD	FA9472-8	Limits
1868-53-7	Dibromofluoromethane	94%	94%	98%	75-124%
2037-26-5	Toluene-D8	90%	91%	90%	75-126%
460-00-4	4-Bromofluorobenzene	90%	94%	92%	71-133%
17060-07-0	1,2-Dichloroethane-D4	91%	92%	105%	72-135%

(a) Sample was prepared from a bulk container.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9376-3MS	H0083039.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3MSD	H0083040.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3	H0083027.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-3, FA9376-5

CAS No.	Compound	FA9376-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	43.1		402	468	106	457	103	2	61-152/27
107-02-8	Acrolein	ND		402	134	33*	113	28*	17	48-178/37
107-13-1	Acrylonitrile	ND		402	342	85	322	80	6	66-134/26
71-43-2	Benzene	ND		80.3	94.3	117	72.8	91	26	76-126/26
108-86-1	Bromobenzene	ND		80.3	78.6	98	76.4	95	3	76-122/32
74-97-5	Bromochloromethane	ND		80.3	76.6	95	69.7	87	9	77-120/24
75-27-4	Bromodichloromethane	ND		80.3	170	212*	217	271*	24	74-130/25
75-25-2	Bromoform	ND		80.3	76.0	95	66.7	83	13	76-127/26
104-51-8	n-Butylbenzene	ND		80.3	61.1	76	57.7	72	6	71-128/35
135-98-8	sec-Butylbenzene	ND		80.3	72.1	90	69.7	87	3	79-135/34
98-06-6	tert-Butylbenzene	ND		80.3	12.0	15*	11.1	14*	8	77-133/34
108-90-7	Chlorobenzene	ND		80.3	83.1	103	81.5	102	2	81-129/29
75-00-3	Chloroethane	ND		80.3	68.2	85	61.4	77	10	68-133/29
67-66-3	Chloroform	ND		80.3	78.9	98	71.2	89	10	72-123/26
95-49-8	o-Chlorotoluene	ND		80.3	81.3	101	79.0	99	3	77-129/33
106-43-4	p-Chlorotoluene	ND		80.3	85.7	107	83.5	104	3	80-134/33
110-75-8	2-Chloroethyl vinyl ether	ND		402	321	80	312	78	3	45-159/26
75-15-0	Carbon disulfide	2.7	J	80.3	61.6	73	57.3	68*	7	72-122/29
56-23-5	Carbon tetrachloride	ND		80.3	84.7	105	74.4	93	13	78-133/29
75-34-3	1,1-Dichloroethane	ND		80.3	78.7	98	72.5	90	8	73-125/27
75-35-4	1,1-Dichloroethylene	ND		80.3	80.3	100	81.1	101	1	81-136/28
563-58-6	1,1-Dichloropropene	ND		80.3	67.5	84	63.1	79	7	75-130/28
96-12-8	1,2-Dibromo-3-chloropropane	ND		80.3	126	157*	190	237*	41*	70-137/29
106-93-4	1,2-Dibromoethane	ND		80.3	83.1	103	78.3	98	6	77-126/26
107-06-2	1,2-Dichloroethane	ND		80.3	85.8	107	77.9	97	10	74-128/23
78-87-5	1,2-Dichloropropane	ND		80.3	83.5	104	78.0	97	7	74-125/25
142-28-9	1,3-Dichloropropane	ND		80.3	80.4	100	76.8	96	5	76-122/26
594-20-7	2,2-Dichloropropane	ND		80.3	59.2	74*	43.4	54*	31*	77-133/28
124-48-1	Dibromochloromethane	ND		80.3	69.2	86	61.5	77	12	76-127/27
75-71-8	Dichlorodifluoromethane	ND		80.3	73.1	91	51.8	65*	34*	68-168/29
156-59-2	cis-1,2-Dichloroethylene	ND		80.3	80.1	100	74.8	93	7	74-126/26
10061-01-5	cis-1,3-Dichloropropene	ND		80.3	61.9	77*	39.6	49*	44*	80-123/26
541-73-1	m-Dichlorobenzene	ND		80.3	85.8	107	82.8	103	4	81-129/33
95-50-1	o-Dichlorobenzene	ND		80.3	87.6	109	82.6	103	6	80-129/32
106-46-7	p-Dichlorobenzene	ND		80.3	78.2	97	75.9	95	3	76-130/32
156-60-5	trans-1,2-Dichloroethylene	ND		80.3	76.4	95	71.3	89	7	70-127/27

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9376-3MS	H0083039.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3MSD	H0083040.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3	H0083027.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-3, FA9376-5

CAS No.	Compound	FA9376-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		80.3	67.2	84	59.8	75	12	75-131/28
100-41-4	Ethylbenzene	ND		80.3	80.6	100	79.9	100	1	77-123/31
591-78-6	2-Hexanone	ND		402	379	94	490	122	26	72-133/26
87-68-3	Hexachlorobutadiene	ND		80.3	60.5	75	52.6	66*	14	74-136/38
110-54-3	Hexane	ND		80.3	59.6	74	56.8	71*	5	72-130/32
98-82-8	Isopropylbenzene	ND		80.3	77.5	96	76.6	96	1	80-136/32
99-87-6	p-Isopropyltoluene	ND		80.3	69.6	87	65.4	82	6	77-131/34
108-10-1	4-Methyl-2-pentanone	ND		402	396	99	409	102	3	76-132/26
74-83-9	Methyl bromide	ND		80.3	77.6	97	68.3	85	13	65-139/31
74-87-3	Methyl chloride	ND		80.3	71.1	89	65.7	82	8	71-144/27
74-95-3	Methylene bromide	ND		80.3	82.2	102	74.1	92	10	74-124/24
75-09-2	Methylene chloride	ND		80.3	88.8	111	84.1	105	5	74-137/28
78-93-3	Methyl ethyl ketone	ND		402	402	100	380	95	6	75-137/25
1634-04-4	Methyl Tert Butyl Ether	ND		80.3	64.8	81	63.8	80	2	77-120/24
91-20-3	Naphthalene	ND		80.3	70.3	88	67.3	84	4	79-129/33
103-65-1	n-Propylbenzene	ND		80.3	79.0	98	76.9	96	3	80-135/33
100-42-5	Styrene	ND		80.3	72.0	90	72.0	90	0	78-125/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		80.3	81.8	102	74.0	92	10	78-126/27
71-55-6	1,1,1-Trichloroethane	ND		80.3	71.8	89	56.5	71	24	70-129/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		80.3	86.0	107	95.9	120	11	71-126/30
79-00-5	1,1,2-Trichloroethane	ND		80.3	91.4	114	110	137*	18	74-124/28
87-61-6	1,2,3-Trichlorobenzene	ND		80.3	79.8	99	74.2	93	7	77-128/35
96-18-4	1,2,3-Trichloropropane	ND		80.3	98.9	123	116	145*	16	74-127/27
120-82-1	1,2,4-Trichlorobenzene	ND		80.3	73.0	91	67.6	84	8	78-130/34
95-63-6	1,2,4-Trimethylbenzene	ND		80.3	78.8	98	75.2	94	5	74-123/34
108-67-8	1,3,5-Trimethylbenzene	ND		80.3	78.0	97	75.7	94	3	73-122/33
127-18-4	Tetrachloroethylene	ND		80.3	83.1	103	79.3	99	5	79-130/31
108-88-3	Toluene	ND		80.3	77.8	97	76.6	96	2	76-124/30
79-01-6	Trichloroethylene	ND		80.3	79.3	99	75.2	94	5	75-128/27
75-69-4	Trichlorofluoromethane	ND		80.3	71.5	89	64.4	80	10	73-145/31
75-01-4	Vinyl chloride	ND		80.3	70.6	88	64.2	80	9	76-141/27
108-05-4	Vinyl Acetate	ND		402	308	77	294	73	5	48-164/37
	m,p-Xylene	ND		161	145	90	142	89	2	80-128/30
95-47-6	o-Xylene	ND		80.3	79.7	99	79.6	99	0	80-132/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9376-3MS	H0083039.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3MSD	H0083040.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3	H0083027.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9376-1, FA9376-3, FA9376-5

CAS No.	Surrogate Recoveries	MS	MSD	FA9376-3	Limits
1868-53-7	Dibromofluoromethane	92%	81%	90%	75-124%
2037-26-5	Toluene-D8	90%	91%	85%	75-126%
460-00-4	4-Bromofluorobenzene	94%	88%	91%	71-133%
17060-07-0	1,2-Dichloroethane-D4	87%	102%	95%	72-135%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MB	U041766.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-1, FA9376-2, FA9376-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	830	170	ug/kg	
95-57-8	2-Chlorophenol	ND	170	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	18	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	19	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	24	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	21	ug/kg	
	3&4-Methylphenol	ND	170	35	ug/kg	
88-75-5	2-Nitrophenol	ND	170	25	ug/kg	
100-02-7	4-Nitrophenol	ND	830	130	ug/kg	
87-86-5	Pentachlorophenol	ND	830	130	ug/kg	
108-95-2	Phenol	ND	170	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	20	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	21	ug/kg	
83-32-9	Acenaphthene	ND	170	20	ug/kg	
208-96-8	Acenaphthylene	ND	170	19	ug/kg	
62-53-3	Aniline	ND	170	53	ug/kg	
120-12-7	Anthracene	ND	170	17	ug/kg	
92-87-5	Benzidine	ND	1700	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	21	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	22	ug/kg	
106-47-8	4-Chloroaniline	ND	170	25	ug/kg	
86-74-8	Carbazole	ND	170	18	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	23	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	17	ug/kg	

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MB	U041766.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-1, FA9376-2, FA9376-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	170	17	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	18	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	17	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	17	ug/kg	
132-64-9	Dibenzofuran	ND	170	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate	ND	330	33	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	33	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	33	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	23	ug/kg	
67-72-1	Hexachloroethane	ND	170	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	17	ug/kg	
78-59-1	Isophorone	ND	170	18	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	23	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	25	ug/kg	
99-09-2	3-Nitroaniline	ND	170	23	ug/kg	
100-01-6	4-Nitroaniline	ND	170	36	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
98-95-3	Nitrobenzene	ND	170	24	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	24	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	17	ug/kg	
110-86-1	Pyridine	ND	330	38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	18	ug/kg	

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MB	U041766.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-1, FA9376-2, FA9376-3

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	82%	40-102%
4165-62-2	Phenol-d5	83%	41-100%
118-79-6	2,4,6-Tribromophenol	94%	42-108%
4165-60-0	Nitrobenzene-d5	76%	40-105%
321-60-8	2-Fluorobiphenyl	84%	43-107%
1718-51-0	Terphenyl-d14	112%	45-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
4161-60-8	2-Pentanone, 4-hydroxy-	2.54	220	ug/kg	JN
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.78	6500	ug/kg	JN
	Total TIC, Semi-Volatile		6720	ug/kg	J

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-MB	T010357.D	1	11/05/13	FS	11/01/13	OP49263	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	830	170	ug/kg	
95-57-8	2-Chlorophenol	ND	170	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	18	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	19	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	24	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	21	ug/kg	
	3&4-Methylphenol	ND	170	35	ug/kg	
88-75-5	2-Nitrophenol	ND	170	25	ug/kg	
100-02-7	4-Nitrophenol	ND	830	130	ug/kg	
87-86-5	Pentachlorophenol	ND	830	130	ug/kg	
108-95-2	Phenol	ND	170	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	20	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	21	ug/kg	
83-32-9	Acenaphthene	ND	170	20	ug/kg	
208-96-8	Acenaphthylene	ND	170	19	ug/kg	
62-53-3	Aniline	ND	170	53	ug/kg	
120-12-7	Anthracene	ND	170	17	ug/kg	
92-87-5	Benzidine	ND	1700	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	21	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	22	ug/kg	
106-47-8	4-Chloroaniline	ND	170	25	ug/kg	
86-74-8	Carbazole	ND	170	18	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	23	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	17	ug/kg	

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-MB	T010357.D	1	11/05/13	FS	11/01/13	OP49263	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	170	17	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	18	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	17	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	17	ug/kg	
132-64-9	Dibenzofuran	ND	170	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate	ND	330	33	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	33	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	33	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	23	ug/kg	
67-72-1	Hexachloroethane	ND	170	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	17	ug/kg	
78-59-1	Isophorone	ND	170	18	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	23	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	25	ug/kg	
99-09-2	3-Nitroaniline	ND	170	23	ug/kg	
100-01-6	4-Nitroaniline	ND	170	36	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
98-95-3	Nitrobenzene	ND	170	24	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	24	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	17	ug/kg	
110-86-1	Pyridine	ND	330	38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	18	ug/kg	

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-MB	T010357.D	1	11/05/13	FS	11/01/13	OP49263	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	65%	40-102%
4165-62-2	Phenol-d5	77%	41-100%
118-79-6	2,4,6-Tribromophenol	76%	42-108%
4165-60-0	Nitrobenzene-d5	68%	40-105%
321-60-8	2-Fluorobiphenyl	69%	43-107%
1718-51-0	Terphenyl-d14	80%	45-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile [a]		0	ug/kg	

(a) No TICs detected.

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-MB	T010413.D	1	11/07/13	FS	11/01/13	OP49263	ST499

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	830	170	ug/kg	
95-57-8	2-Chlorophenol	ND	170	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	18	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	19	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	24	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	21	ug/kg	
	3&4-Methylphenol	ND	170	35	ug/kg	
88-75-5	2-Nitrophenol	ND	170	25	ug/kg	
100-02-7	4-Nitrophenol	ND	830	130	ug/kg	
87-86-5	Pentachlorophenol	ND	830	130	ug/kg	
108-95-2	Phenol	ND	170	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	20	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	21	ug/kg	
83-32-9	Acenaphthene	ND	170	20	ug/kg	
208-96-8	Acenaphthylene	ND	170	19	ug/kg	
62-53-3	Aniline	ND	170	53	ug/kg	
120-12-7	Anthracene	ND	170	17	ug/kg	
92-87-5	Benzidine	ND	1700	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	21	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	22	ug/kg	
106-47-8	4-Chloroaniline	ND	170	25	ug/kg	
86-74-8	Carbazole	ND	170	18	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	23	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	17	ug/kg	

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-MB	T010413.D	1	11/07/13	FS	11/01/13	OP49263	ST499

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	170	17	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	18	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	17	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	17	ug/kg	
132-64-9	Dibenzofuran	ND	170	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate	ND	330	33	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	33	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	33	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	23	ug/kg	
67-72-1	Hexachloroethane	ND	170	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	17	ug/kg	
78-59-1	Isophorone	ND	170	18	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	23	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	25	ug/kg	
99-09-2	3-Nitroaniline	ND	170	23	ug/kg	
100-01-6	4-Nitroaniline	ND	170	36	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
98-95-3	Nitrobenzene	ND	170	24	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	24	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	17	ug/kg	
110-86-1	Pyridine	ND	330	38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	18	ug/kg	

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-MB	T010413.D	1	11/07/13	FS	11/01/13	OP49263	ST499

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	70%	40-102%
4165-62-2	Phenol-d5	82%	41-100%
118-79-6	2,4,6-Tribromophenol	76%	42-108%
4165-60-0	Nitrobenzene-d5	68%	40-105%
321-60-8	2-Fluorobiphenyl	73%	43-107%
1718-51-0	Terphenyl-d14	90%	45-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile [a]		0	ug/kg	

(a) No TICs detected.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-BS	U041765.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-1, FA9376-2, FA9376-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic Acid	3330	2430	73	36-118
95-57-8	2-Chlorophenol	1670	1160	70	48-104
59-50-7	4-Chloro-3-methyl phenol	1670	1230	74	52-108
120-83-2	2,4-Dichlorophenol	1670	1290	77	51-105
105-67-9	2,4-Dimethylphenol	1670	1220	73	43-96
51-28-5	2,4-Dinitrophenol	3330	2400	72	40-119
534-52-1	4,6-Dinitro-o-cresol	3330	2710	81	64-121
95-48-7	2-Methylphenol	1670	1170	70	46-107
	3&4-Methylphenol	3330	2580	77	44-111
88-75-5	2-Nitrophenol	1670	1260	76	49-104
100-02-7	4-Nitrophenol	3330	2410	72	56-116
87-86-5	Pentachlorophenol	3330	3200	96	61-114
108-95-2	Phenol	1670	1200	72	45-110
95-95-4	2,4,5-Trichlorophenol	1670	1420	85	58-112
88-06-2	2,4,6-Trichlorophenol	1670	1420	85	56-109
83-32-9	Acenaphthene	1670	1380	83	56-109
208-96-8	Acenaphthylene	1670	1410	85	56-106
62-53-3	Aniline	1670	1200	72	42-108
120-12-7	Anthracene	1670	1440	86	61-110
92-87-5	Benzidine	1670	889	53	10-109
56-55-3	Benzo(a)anthracene	1670	1430	86	66-111
50-32-8	Benzo(a)pyrene	1670	1420	85	59-104
205-99-2	Benzo(b)fluoranthene	1670	1440	86	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1410	85	67-113
207-08-9	Benzo(k)fluoranthene	1670	1580	95	67-114
101-55-3	4-Bromophenyl phenyl ether	1670	1250	75	62-110
85-68-7	Butyl benzyl phthalate	1670	1430	86	65-113
100-51-6	Benzyl Alcohol	1670	1470	88	53-108
91-58-7	2-Chloronaphthalene	1670	1310	79	53-106
106-47-8	4-Chloroaniline	1670	1190	71	30-115
86-74-8	Carbazole	1670	1360	82	60-111
218-01-9	Chrysene	1670	1520	91	65-112
111-91-1	bis(2-Chloroethoxy)methane	1670	1240	74	48-105
111-44-4	bis(2-Chloroethyl)ether	1670	1160	70	46-103
108-60-1	bis(2-Chloroisopropyl)ether	1670	1150	69	40-110
7005-72-3	4-Chlorophenyl phenyl ether	1670	1320	79	58-106

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-BS	U041765.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-1, FA9376-2, FA9376-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	1670	1130	68	44-102
122-66-7	1,2-Diphenylhydrazine	1670	1340	80	58-112
541-73-1	1,3-Dichlorobenzene	1670	1120	67	42-100
106-46-7	1,4-Dichlorobenzene	1670	1170	70	40-106
121-14-2	2,4-Dinitrotoluene	1670	1310	79	59-109
606-20-2	2,6-Dinitrotoluene	1670	1310	79	61-107
91-94-1	3,3'-Dichlorobenzidine	1670	1350	81	36-114
53-70-3	Dibenzo(a,h)anthracene	1670	1440	86	68-115
132-64-9	Dibenzofuran	1670	1410	85	57-108
84-74-2	Di-n-butyl phthalate	1670	1300	78	63-108
117-84-0	Di-n-octyl phthalate	1670	1460	88	64-119
84-66-2	Diethyl phthalate	1670	1300	78	61-109
131-11-3	Dimethyl phthalate	1670	1300	78	59-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1450	87	64-115
206-44-0	Fluoranthene	1670	1340	80	60-108
86-73-7	Fluorene	1670	1400	84	58-109
118-74-1	Hexachlorobenzene	1670	1480	89	59-111
87-68-3	Hexachlorobutadiene	1670	1310	79	41-108
77-47-4	Hexachlorocyclopentadiene	1670	1230	74	49-110
67-72-1	Hexachloroethane	1670	1150	69	40-105
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1340	80	66-116
78-59-1	Isophorone	1670	1190	71	42-89
90-12-0	1-Methylnaphthalene	1670	1270	76	49-106
91-57-6	2-Methylnaphthalene	1670	1260	76	47-106
88-74-4	2-Nitroaniline	1670	1320	79	56-123
99-09-2	3-Nitroaniline	1670	1120	67	41-111
100-01-6	4-Nitroaniline	1670	1280	77	54-113
91-20-3	Naphthalene	1670	1290	77	44-104
98-95-3	Nitrobenzene	1670	1160	70	43-108
62-75-9	N-Nitrosodimethylamine	1670	1040	62	40-106
621-64-7	N-Nitroso-di-n-propylamine	1670	1210	73	48-108
86-30-6	N-Nitrosodiphenylamine	1670	1420	85	62-110
85-01-8	Phenanthrene	1670	1440	86	63-111
129-00-0	Pyrene	1670	1520	91	65-115
110-86-1	Pyridine	1670	1070	64	31-102
120-82-1	1,2,4-Trichlorobenzene	1670	1200	72	45-100

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-BS	U041765.D	1	11/01/13	NAF	10/31/13	OP49247	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-1, FA9376-2, FA9376-3

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	74%	40-102%
4165-62-2	Phenol-d5	75%	41-100%
118-79-6	2,4,6-Tribromophenol	92%	42-108%
4165-60-0	Nitrobenzene-d5	72%	40-105%
321-60-8	2-Fluorobiphenyl	79%	43-107%
1718-51-0	Terphenyl-d14	96%	45-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-BS	T010356.D	1	11/05/13	FS	11/01/13	OP49263	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic Acid	3330	2750	83	36-118
95-57-8	2-Chlorophenol	1670	1100	66	48-104
59-50-7	4-Chloro-3-methyl phenol	1670	1250	75	52-108
120-83-2	2,4-Dichlorophenol	1670	1170	70	51-105
105-67-9	2,4-Dimethylphenol	1670	1100	66	43-96
51-28-5	2,4-Dinitrophenol	3330	2920	88	40-119
534-52-1	4,6-Dinitro-o-cresol	3330	3160	95	64-121
95-48-7	2-Methylphenol	1670	1210	73	46-107
	3&4-Methylphenol	3330	2360	71	44-111
88-75-5	2-Nitrophenol	1670	1140	68	49-104
100-02-7	4-Nitrophenol	3330	2720	82	56-116
87-86-5	Pentachlorophenol	3330	2620	79	61-114
108-95-2	Phenol	1670	1240	74	45-110
95-95-4	2,4,5-Trichlorophenol	1670	1340	80	58-112
88-06-2	2,4,6-Trichlorophenol	1670	1300	78	56-109
83-32-9	Acenaphthene	1670	1320	79	56-109
208-96-8	Acenaphthylene	1670	1340	80	56-106
62-53-3	Aniline	1670	1620	97	42-108
120-12-7	Anthracene	1670	1390	83	61-110
92-87-5	Benzidine	1670	1200	72	10-109
56-55-3	Benzo(a)anthracene	1670	1420	85	66-111
50-32-8	Benzo(a)pyrene	1670	1380	83	59-104
205-99-2	Benzo(b)fluoranthene	1670	1450	87	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1570	94	67-113
207-08-9	Benzo(k)fluoranthene	1670	1370	82	67-114
101-55-3	4-Bromophenyl phenyl ether	1670	1120	67	62-110
85-68-7	Butyl benzyl phthalate	1670	1400	84	65-113
100-51-6	Benzyl Alcohol	1670	1600	96	53-108
91-58-7	2-Chloronaphthalene	1670	1230	74	53-106
106-47-8	4-Chloroaniline	1670	1610	97	30-115
86-74-8	Carbazole	1670	1790	107	60-111
218-01-9	Chrysene	1670	1480	89	65-112
111-91-1	bis(2-Chloroethoxy)methane	1670	1190	71	48-105
111-44-4	bis(2-Chloroethyl)ether	1670	1160	70	46-103
108-60-1	bis(2-Chloroisopropyl)ether	1670	1170	70	40-110
7005-72-3	4-Chlorophenyl phenyl ether	1670	1270	76	58-106

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-BS	T010356.D	1	11/05/13	FS	11/01/13	OP49263	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	1670	1060	64	44-102
122-66-7	1,2-Diphenylhydrazine	1670	1320	79	58-112
541-73-1	1,3-Dichlorobenzene	1670	1060	64	42-100
106-46-7	1,4-Dichlorobenzene	1670	1120	67	40-106
121-14-2	2,4-Dinitrotoluene	1670	1330	80	59-109
606-20-2	2,6-Dinitrotoluene	1670	1320	79	61-107
91-94-1	3,3'-Dichlorobenzidine	1670	1930	116*	36-114
53-70-3	Dibenzo(a,h)anthracene	1670	1540	92	68-115
132-64-9	Dibenzofuran	1670	1680	101	57-108
84-74-2	Di-n-butyl phthalate	1670	1350	81	63-108
117-84-0	Di-n-octyl phthalate	1670	1370	82	64-119
84-66-2	Diethyl phthalate	1670	1330	80	61-109
131-11-3	Dimethyl phthalate	1670	1280	77	59-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1430	86	64-115
206-44-0	Fluoranthene	1670	1410	85	60-108
86-73-7	Fluorene	1670	1390	83	58-109
118-74-1	Hexachlorobenzene	1670	1310	79	59-111
87-68-3	Hexachlorobutadiene	1670	1110	67	41-108
77-47-4	Hexachlorocyclopentadiene	1670	1120	67	49-110
67-72-1	Hexachloroethane	1670	1080	65	40-105
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1520	91	66-116
78-59-1	Isophorone	1670	1160	70	42-89
90-12-0	1-Methylnaphthalene	1670	1180	71	49-106
91-57-6	2-Methylnaphthalene	1670	1470	88	47-106
88-74-4	2-Nitroaniline	1670	1810	109	56-123
99-09-2	3-Nitroaniline	1670	1800	108	41-111
100-01-6	4-Nitroaniline	1670	1900	114*	54-113
91-20-3	Naphthalene	1670	1140	68	44-104
98-95-3	Nitrobenzene	1670	1100	66	43-108
62-75-9	N-Nitrosodimethylamine	1670	1110	67	40-106
621-64-7	N-Nitroso-di-n-propylamine	1670	1230	74	48-108
86-30-6	N-Nitrosodiphenylamine	1670	1340	80	62-110
85-01-8	Phenanthrene	1670	1390	83	63-111
129-00-0	Pyrene	1670	1430	86	65-115
110-86-1	Pyridine	1670	1460	88	31-102
120-82-1	1,2,4-Trichlorobenzene	1670	1050	63	45-100

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-BS	T010356.D	1	11/05/13	FS	11/01/13	OP49263	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	68%	40-102%
4165-62-2	Phenol-d5	76%	41-100%
118-79-6	2,4,6-Tribromophenol	77%	42-108%
4165-60-0	Nitrobenzene-d5	66%	40-105%
321-60-8	2-Fluorobiphenyl	73%	43-107%
1718-51-0	Terphenyl-d14	89%	45-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MS	L066559.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
OP49247-MSD	L066560.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
FA9292-1R	L066558.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-1, FA9376-2, FA9376-3

CAS No.	Compound	FA9292-1R ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		3800	2640	69	2420	63	9	36-118/41
95-57-8	2-Chlorophenol	ND		1900	1180	62	1080	56	9	48-104/26
59-50-7	4-Chloro-3-methyl phenol	ND		1900	1230	65	1090	57	12	52-108/21
120-83-2	2,4-Dichlorophenol	ND		1900	1200	63	1120	58	7	51-105/27
105-67-9	2,4-Dimethylphenol	ND		1900	1170	62	1080	56	8	43-96/23
51-28-5	2,4-Dinitrophenol	ND		3800	2580	68	2060	54	22	40-119/32
534-52-1	4,6-Dinitro-o-cresol	ND		3800	2810	74	2330	61*	19	64-121/29
95-48-7	2-Methylphenol	ND		1900	1280	67	1160	60	10	46-107/24
	3&4-Methylphenol	ND		3800	2580	68	2330	61	10	44-111/24
88-75-5	2-Nitrophenol	ND		1900	1230	65	1180	61	4	49-104/27
100-02-7	4-Nitrophenol	ND		3800	2980	78	2410	63	21	56-116/23
87-86-5	Pentachlorophenol	ND		3800	3040	80	2720	71	11	61-114/23
108-95-2	Phenol	ND		1900	1270	67	1160	60	9	45-110/24
95-95-4	2,4,5-Trichlorophenol	ND		1900	1540	81	1420	74	8	58-112/22
88-06-2	2,4,6-Trichlorophenol	ND		1900	1500	79	1390	72	8	56-109/25
83-32-9	Acenaphthene	ND		1900	1460	77	1420	74	3	56-109/23
208-96-8	Acenaphthylene	ND		1900	1520	80	1520	79	0	56-106/23
62-53-3	Aniline	ND		1900	1160	61	869	45	29*	42-108/28
120-12-7	Anthracene	ND		1900	1590	84	1880	98	17	61-110/21
92-87-5	Benzidine	ND		1900	ND	0*	ND	0*	nc	10-109/35
56-55-3	Benzo(a)anthracene	86.0	J	1900	1660	83	3120	158*	61*	66-111/23
50-32-8	Benzo(a)pyrene	97.0	J	1900	1590	79	2930	147*	59*	59-104/23
205-99-2	Benzo(b)fluoranthene	94.4	J	1900	1610	80	2830	142*	55*	67-113/24
191-24-2	Benzo(g,h,i)perylene	75.2	J	1900	1800	91	2800	142*	43*	67-113/21
207-08-9	Benzo(k)fluoranthene	99.3	J	1900	1570	77	2270	113	36*	67-114/22
101-55-3	4-Bromophenyl phenyl ether	ND		1900	1360	72	1270	66	7	62-110/21
85-68-7	Butyl benzyl phthalate	ND		1900	1640	86	1390	72	17	65-113/20
100-51-6	Benzyl Alcohol	ND		1900	1310	69	1140	59	14	53-108/24
91-58-7	2-Chloronaphthalene	ND		1900	1410	74	1340	70	5	53-106/23
106-47-8	4-Chloroaniline	ND		1900	978	51	789	41	21	30-115/30
86-74-8	Carbazole	ND		1900	1480	78	1320	69	11	60-111/19
218-01-9	Chrysene	132	J	1900	1770	86	3640	183*	69*	65-112/25
111-91-1	bis(2-Chloroethoxy)methane	ND		1900	1220	64	1150	60	6	48-105/24
111-44-4	bis(2-Chloroethyl)ether	ND		1900	1220	64	1140	59	7	46-103/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		1900	1300	68	1230	64	6	40-110/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		1900	1420	75	1270	66	11	58-106/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MS	L066559.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
OP49247-MSD	L066560.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
FA9292-1R	L066558.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-1, FA9376-2, FA9376-3

CAS No.	Compound	FA9292-1R ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		1900	1160	61	1080	56	7	44-102/28
122-66-7	1,2-Diphenylhydrazine	ND		1900	1600	84	1510	79	6	58-112/22
541-73-1	1,3-Dichlorobenzene	ND		1900	1140	60	1070	56	6	42-100/30
106-46-7	1,4-Dichlorobenzene	ND		1900	1210	64	1140	59	6	40-106/29
121-14-2	2,4-Dinitrotoluene	ND		1900	1640	86	1350	70	19	59-109/20
606-20-2	2,6-Dinitrotoluene	ND		1900	1610	85	1450	75	10	61-107/22
91-94-1	3,3'-Dichlorobenzidine	ND		1900	1190	63	749	39	45*	36-114/28
53-70-3	Dibenzo(a,h)anthracene	ND		1900	1800	95	2100	109	15	68-115/23
132-64-9	Dibenzofuran	ND		1900	1540	81	1370	71	12	57-108/22
84-74-2	Di-n-butyl phthalate	ND		1900	1530	80	1350	70	13	63-108/19
117-84-0	Di-n-octyl phthalate	ND		1900	1610	85	1280	67	23*	64-119/21
84-66-2	Diethyl phthalate	136	J	1900	1450	69	1270	59*	13	61-109/20
131-11-3	Dimethyl phthalate	ND		1900	1470	77	1330	69	10	59-108/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		1900	1670	88	1440	75	15	64-115/23
206-44-0	Fluoranthene	220		1900	1660	76	3980	196*	82*	60-108/25
86-73-7	Fluorene	ND		1900	1490	78	1470	77	1	58-109/21
118-74-1	Hexachlorobenzene	ND		1900	1550	82	1360	71	13	59-111/21
87-68-3	Hexachlorobutadiene	ND		1900	1230	65	1250	65	2	41-108/27
77-47-4	Hexachlorocyclopentadiene	ND		1900	1120	59	986	51	13	49-110/31
67-72-1	Hexachloroethane	ND		1900	1190	63	1110	58	7	40-105/32
193-39-5	Indeno(1,2,3-cd)pyrene	78.2	J	1900	1710	86	2740	139*	46*	66-116/22
78-59-1	Isophorone	ND		1900	1170	62	1080	56	8	42-89/22
90-12-0	1-Methylnaphthalene	ND		1900	1190	63	1140	59	4	49-106/26
91-57-6	2-Methylnaphthalene	ND		1900	1270	67	1150	60	10	47-106/27
88-74-4	2-Nitroaniline	ND		1900	1680	88	1520	79	10	56-123/24
99-09-2	3-Nitroaniline	ND		1900	1300	68	1100	57	17	41-111/25
100-01-6	4-Nitroaniline	ND		1900	1340	70	1070	56	22	54-113/22
91-20-3	Naphthalene	ND		1900	1230	65	1190	62	3	44-104/27
98-95-3	Nitrobenzene	ND		1900	1190	63	1140	59	4	43-108/25
62-75-9	N-Nitrosodimethylamine	ND		1900	1370	72	1260	66	8	40-106/27
621-64-7	N-Nitroso-di-n-propylamine	ND		1900	1280	67	1170	61	9	48-108/27
86-30-6	N-Nitrosodiphenylamine	ND		1900	1610	85	1560	81	3	62-110/21
85-01-8	Phenanthrene	152	J	1900	1740	84	3320	165*	62*	63-111/22
129-00-0	Pyrene	248		1900	1930	88	5750	286*	99*	65-115/25
110-86-1	Pyridine	ND		1900	991	52	831	43	18	31-102/38
120-82-1	1,2,4-Trichlorobenzene	ND		1900	1140	60	1120	58	2	45-100/26

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49247-MS	L066559.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
OP49247-MSD	L066560.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345
FA9292-1R	L066558.D	1	11/04/13	NAF	10/31/13	OP49247	SL3345

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-1, FA9376-2, FA9376-3

CAS No.	Surrogate Recoveries	MS	MSD	FA9292-1R	Limits
367-12-4	2-Fluorophenol	70%	62%	69%	40-102%
4165-62-2	Phenol-d5	72%	64%	70%	41-100%
118-79-6	2,4,6-Tribromophenol	84%	74%	79%	42-108%
4165-60-0	Nitrobenzene-d5	67%	62%	72%	40-105%
321-60-8	2-Fluorobiphenyl	80%	72%	74%	43-107%
1718-51-0	Terphenyl-d14	95%	78%	90%	45-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-MS	T010367.D	1	11/05/13	FS	11/01/13	OP49263	ST497
OP49263-MSD	T010368.D	1	11/05/13	FS	11/01/13	OP49263	ST497
FA9385-8	T010366.D	1	11/05/13	FS	11/01/13	OP49263	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Compound	FA9385-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		4300	4330	101	3890	91	11	36-118/41
95-57-8	2-Chlorophenol	ND		2150	1530	71	1410	66	8	48-104/26
59-50-7	4-Chloro-3-methyl phenol	ND		2150	1680	78	1560	73	7	52-108/21
120-83-2	2,4-Dichlorophenol	ND		2150	1630	76	1490	70	9	51-105/27
105-67-9	2,4-Dimethylphenol	ND		2150	1520	71	1400	65	8	43-96/23
51-28-5	2,4-Dinitrophenol	ND		4300	4030	94	3840	90	5	40-119/32
534-52-1	4,6-Dinitro-o-cresol	ND		4300	4430	103	4290	100	3	64-121/29
95-48-7	2-Methylphenol	ND		2150	1630	76	1520	71	7	46-107/24
	3&4-Methylphenol	ND		4300	3120	73	2960	69	5	44-111/24
88-75-5	2-Nitrophenol	ND		2150	1610	75	1470	69	9	49-104/27
100-02-7	4-Nitrophenol	ND		4300	3780	88	3570	83	6	56-116/23
87-86-5	Pentachlorophenol	ND		4300	3760	88	3610	84	4	61-114/23
108-95-2	Phenol	ND		2150	1690	79	1550	72	9	45-110/24
95-95-4	2,4,5-Trichlorophenol	ND		2150	1850	86	1720	80	7	58-112/22
88-06-2	2,4,6-Trichlorophenol	ND		2150	1800	84	1680	78	7	56-109/25
83-32-9	Acenaphthene	ND		2150	1820	85	1710	80	6	56-109/23
208-96-8	Acenaphthylene	ND		2150	1840	86	1740	81	6	56-106/23
62-53-3	Aniline	ND		2150	2130	99	2000	93	6	42-108/28
120-12-7	Anthracene	ND		2150	1960	91	1880	88	4	61-110/21
56-55-3	Benzo(a)anthracene	ND		2150	2050	95	1930	90	6	66-111/23
50-32-8	Benzo(a)pyrene	ND		2150	2020	94	1920	90	5	59-104/23
205-99-2	Benzo(b)fluoranthene	ND		2150	2090	97	1980	92	5	67-113/24
191-24-2	Benzo(g,h,i)perylene	ND		2150	2240	104	2190	102	2	67-113/21
207-08-9	Benzo(k)fluoranthene	ND		2150	1990	93	1920	90	4	67-114/22
101-55-3	4-Bromophenyl phenyl ether	ND		2150	1590	74	1510	71	5	62-110/21
85-68-7	Butyl benzyl phthalate	ND		2150	2000	93	1880	88	6	65-113/20
100-51-6	Benzyl Alcohol	ND		2150	2200	102	2040	95	8	53-108/24
91-58-7	2-Chloronaphthalene	ND		2150	1720	80	1610	75	7	53-106/23
106-47-8	4-Chloroaniline	ND		2150	2110	98	1970	92	7	30-115/30
86-74-8	Carbazole	ND		2150	2510	117*	2420	113*	4	60-111/19
218-01-9	Chrysene	ND		2150	2110	98	2010	94	5	65-112/25
111-91-1	bis(2-Chloroethoxy)methane	ND		2150	1650	77	1530	71	8	48-105/24
111-44-4	bis(2-Chloroethyl)ether	ND		2150	1640	76	1500	70	9	46-103/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		2150	1630	76	1510	71	8	40-110/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		2150	1720	80	1630	76	5	58-106/21
95-50-1	1,2-Dichlorobenzene	ND		2150	1460	68	1360	64	7	44-102/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-MS	T010367.D	1	11/05/13	FS	11/01/13	OP49263	ST497
OP49263-MSD	T010368.D	1	11/05/13	FS	11/01/13	OP49263	ST497
FA9385-8	T010366.D	1	11/05/13	FS	11/01/13	OP49263	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Compound	FA9385-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
122-66-7	1,2-Diphenylhydrazine	ND		2150	1820	85	1730	81	5	58-112/22
541-73-1	1,3-Dichlorobenzene	ND		2150	1460	68	1350	63	8	42-100/30
106-46-7	1,4-Dichlorobenzene	ND		2150	1540	72	1420	66	8	40-106/29
121-14-2	2,4-Dinitrotoluene	ND		2150	1870	87	1770	83	5	59-109/20
606-20-2	2,6-Dinitrotoluene	ND		2150	1820	85	1730	81	5	61-107/22
91-94-1	3,3'-Dichlorobenzidine	ND		2150	1670	78	1350	63	21	36-114/28
53-70-3	Dibenzo(a,h)anthracene	ND		2150	2210	103	2130	100	4	68-115/23
132-64-9	Dibenzofuran	ND		2150	2260	105	2170	101	4	57-108/22
84-74-2	Di-n-butyl phthalate	ND		2150	1910	89	1840	86	4	63-108/19
117-84-0	Di-n-octyl phthalate	ND		2150	2050	95	1910	89	7	64-119/21
84-66-2	Diethyl phthalate	ND		2150	1830	85	1740	81	5	61-109/20
131-11-3	Dimethyl phthalate	ND		2150	1750	81	1650	77	6	59-108/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		2150	2090	97	1960	92	6	64-115/23
206-44-0	Fluoranthene	ND		2150	2020	94	1930	90	5	60-108/25
86-73-7	Fluorene	ND		2150	1900	88	1810	85	5	58-109/21
118-74-1	Hexachlorobenzene	ND		2150	1850	86	1760	82	5	59-111/21
87-68-3	Hexachlorobutadiene	ND		2150	1530	71	1430	67	7	41-108/27
77-47-4	Hexachlorocyclopentadiene	ND		2150	1550	72	1450	68	7	49-110/31
67-72-1	Hexachloroethane	ND		2150	1460	68	1390	65	5	40-105/32
193-39-5	Indeno(1,2,3-cd)pyrene	ND		2150	2140	100	2070	97	3	66-116/22
78-59-1	Isophorone	ND		2150	1590	74	1450	68	9	42-89/22
90-12-0	1-Methylnaphthalene	ND		2150	1650	77	1530	71	8	49-106/26
91-57-6	2-Methylnaphthalene	ND		2150	1990	93	1890	88	5	47-106/27
88-74-4	2-Nitroaniline	ND		2150	2400	112	2300	107	4	56-123/24
99-09-2	3-Nitroaniline	ND		2150	2290	107	2180	102	5	41-111/25
100-01-6	4-Nitroaniline	ND		2150	2500	116*	2380	111	5	54-113/22
91-20-3	Naphthalene	ND		2150	1600	74	1490	70	7	44-104/27
98-95-3	Nitrobenzene	ND		2150	1530	71	1410	66	8	43-108/25
62-75-9	N-Nitrosodimethylamine	ND		2150	1570	73	1440	67	9	40-106/27
621-64-7	N-Nitroso-di-n-propylamine	ND		2150	1640	76	1510	71	8	48-108/27
86-30-6	N-Nitrosodiphenylamine	ND		2150	1890	88	1790	84	5	62-110/21
85-01-8	Phenanthrene	ND		2150	1960	91	1880	88	4	63-111/22
129-00-0	Pyrene	ND		2150	2030	95	1920	90	6	65-115/25
110-86-1	Pyridine	ND		2150	1570	73	1370	64	14	31-102/38
120-82-1	1,2,4-Trichlorobenzene	ND		2150	1470	68	1360	64	8	45-100/26

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49263-MS	T010367.D	1	11/05/13	FS	11/01/13	OP49263	ST497
OP49263-MSD	T010368.D	1	11/05/13	FS	11/01/13	OP49263	ST497
FA9385-8	T010366.D	1	11/05/13	FS	11/01/13	OP49263	ST497

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9376-4, FA9376-5

CAS No.	Surrogate Recoveries	MS	MSD	FA9385-8	Limits
367-12-4	2-Fluorophenol	71%	67%	65%	40-102%
4165-62-2	Phenol-d5	79%	74%	77%	41-100%
118-79-6	2,4,6-Tribromophenol	84%	80%	81%	42-108%
4165-60-0	Nitrobenzene-d5	71%	66%	69%	40-105%
321-60-8	2-Fluorobiphenyl	79%	74%	71%	43-107%
1718-51-0	Terphenyl-d14	97%	93%	84%	45-119%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5090-MB	CD124700.D	1	10/31/13	CP	n/a	n/a	GCD5090

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-1, FA9376-3, FA9376-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	77%	56-149%
98-08-8	aaa-Trifluorotoluene	79%	66-132%

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5091-MB	CD124731.D	1	11/01/13	CP	n/a	n/a	GCD5091

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	82%	56-149%
98-08-8	aaa-Trifluorotoluene	85%	66-132%

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR3397-MB	QR079769.D	1	11/04/13	MM	n/a	n/a	GQR3397

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	104%	56-149%
98-08-8	aaa-Trifluorotoluene	100%	66-132%

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5090-BS	CD124699.D	1	10/31/13	CP	n/a	n/a	GCD5090

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-1, FA9376-3, FA9376-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	18.3	92	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	93%	56-149%
98-08-8	aaa-Trifluorotoluene	99%	66-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5091-BS	CD124730.D	1	11/01/13	CP	n/a	n/a	GCD5091

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	18.2	91	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	97%	56-149%
98-08-8	aaa-Trifluorotoluene	91%	66-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR3397-BS	QR079768.D	1	11/04/13	MM	n/a	n/a	GQR3397

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	22.5	113	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	71%	56-149%
98-08-8	aaa-Trifluorotoluene	98%	66-132%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9524-21MS	CD124707.D	1	10/31/13	CP	n/a	n/a	GCD5090
FA9524-21MSD	CD124708.D	1	10/31/13	CP	n/a	n/a	GCD5090
FA9524-21	CD124703.D	1	10/31/13	CP	n/a	n/a	GCD5090

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-1, FA9376-3, FA9376-5

CAS No.	Compound	FA9524-21 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	2.84	J	20.3	19.7	83	20.1	85	2	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA9524-21	Limits
460-00-4	4-Bromofluorobenzene	106%	96%	95%	56-149%
98-08-8	aaa-Trifluorotoluene	103%	98%	86%	66-132%

8.3.1

8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9376-2MS	CD124738.D	10	11/01/13	CP	n/a	n/a	GCD5091
FA9376-2MSD	CD124739.D	10	11/01/13	CP	n/a	n/a	GCD5091
FA9376-2	CD124736.D	10	11/01/13	CP	n/a	n/a	GCD5091

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-2

CAS No.	Compound	FA9376-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	1320		856	1980	77	1980	77	0	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA9376-2	Limits
460-00-4	4-Bromofluorobenzene	101% [a]	106% [a]		56-149%
460-00-4	4-Bromofluorobenzene	157%* [b]	157%* [b]	143%	56-149%
98-08-8	aaa-Trifluorotoluene	113% [a]	116% [a]	107% [a]	66-132%
98-08-8	aaa-Trifluorotoluene	155%* [b]	161%* [b]	151%* [b]	66-132%

(a) Result reported from PID.
(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9581-21MS	QR079775.D	1	11/04/13	MM	n/a	n/a	GQR3397
FA9581-21MSD	QR079776.D	1	11/04/13	MM	n/a	n/a	GQR3397
FA9581-21	QR079772.D	1	11/04/13	MM	n/a	n/a	GQR3397

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-4

CAS No.	Compound	FA9581-21 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	14.2		22.9	37.8	103	37.6	102	1	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA9581-21	Limits
460-00-4	4-Bromofluorobenzene	110%	121%	114%	56-149%
98-08-8	aaa-Trifluorotoluene	103%	101%	112%	66-132%

8.3.3

8

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49288-MB	YY38955.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-1, FA9376-2, FA9376-3, FA9376-4, FA9376-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	8.3	3.3	mg/kg	
	TPH (> C22-C36)	ND	8.3	3.3	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	102%	56-122%

Blank Spike Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49288-BS	YY38954.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-1, FA9376-2, FA9376-3, FA9376-4, FA9376-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C22)	33.3	31.2	94	65-116
	TPH (> C22-C36)	33.3	29.5	89	51-148

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	121%	56-122%

9.2.1

9

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9376
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49288-MS	YY38978.D	5	11/06/13	SJL	11/04/13	OP49288	GYY1433
OP49288-MSD	YY38979.D	5	11/06/13	SJL	11/04/13	OP49288	GYY1433
FA9516-8	YY38977.D	5	11/06/13	SJL	11/04/13	OP49288	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9376-1, FA9376-2, FA9376-3, FA9376-4, FA9376-5

CAS No.	Compound	FA9516-8 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	148		35.7	155	20* [a]	193	123* [a]	22	65-116/28
	TPH (> C22-C36)	144		35.7	150	17* [a]	197	145	27	51-148/28

CAS No.	Surrogate Recoveries	MS	MSD	FA9516-8	Limits
84-15-1	o-Terphenyl	93%	74%	109%	56-122%

(a) Outside control limits due to high level in sample relative to spike amount.

9.3.1

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

11/15/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA9420

Sampling Dates: 10/23/13 - 10/24/13

Report to:

Bhate Environmental Associates, Inc.

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ATTN: Dustin McNeil

Total number of pages in report: **102**

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Harry Behzadi, Ph.D.
Laboratory Director

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Accutest LabLink@146701 11:10 15-Nov-2013

Sample Summary

Bhate Environmental

Job No: FA9420

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA9420-1	10/23/13	14:50		10/25/13	AQ	Ground Water	SS61-MW21
FA9420-1F	10/23/13	14:50		10/25/13	AQ	Groundwater Filtered	SS61-MW21
FA9420-2	10/23/13	00:00		10/25/13	AQ	Trip Blank Water	TRIP BLANK
FA9420-3	10/24/13	09:30		10/25/13	AQ	Ground Water	SS61-MW23
FA9420-3F	10/24/13	09:30		10/25/13	AQ	Groundwater Filtered	SS61-MW23
FA9420-4	10/24/13	00:00		10/25/13	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA9420

Site: Holloman AFB; SS61 VCM **Report Date** 11/14/2013 1:36:04

2 Samples and 2 Trip Blanks were collected between 10/23/2013 and 10/24/2013 and were received at Accutest SE on 10/25/2013 properly preserved, at 1.8 Deg. C and intact. These Samples received an Accutest job number of FA9420. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VE922

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9543-9MS, FA9543-9MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,2-Dibromo-3-chloropropane, 2-Hexanone, 4-Methyl-2-pentanone, Acrolein, Chloroethane, Dichlorodifluoromethane, Methyl bromide are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 1,2-Dibromo-3-chloropropane, 2-Hexanone, 4-Methyl-2-pentanone, Acrolein are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Chloroethane are outside control limits for sample FA9543-9MSD. Probable cause is due to sample non-homogeneity.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP49235

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JB51050-7MS, JB51050-7MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Di-n-octyl phthalate are outside control limits. Blank Spike recovery is biased high. Analyte is non-detect in associated sample; therefore data integrity is not compromised.

Matrix Spike Recovery(s) for 4,6-Dinitro-o-cresol, bis(2-Chloroethyl)ether are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for Aniline, bis(2-Chloroethyl)ether are outside control limits for sample OP49235-MSD. Probable cause is due to sample non-homogeneity.

FA9420-1 for Di-n-octyl phthalate: Associated BS recovery outside control limits.

Matrix: AQ **Batch ID:** OP49243

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9420-3MS, FA9420-3MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for 4-Bromophenyl phenyl ether are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD5086

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9395-3MS, FA9395-3MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GCD5093

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9506-2MS, FA9506-2MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** OP49233

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9420-1MS, FA9420-1MSD were used as the QC samples indicated.

Metals By Method SW846 6010C

Matrix: AQ **Batch ID:** MP26295

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JB51267-4DUP, JB51267-4MSD, JB51267-4PS, JB51267-4SDL were used as the QC samples for metals.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for Iron are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Recovery(s) for Manganese are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

RPD(s) for Serial Dilution for Manganese are outside control limits for sample MP26295-SD1. Probable cause is due to sample non-homogeneity and/or matrix interference.

MP26295-PS1 for Iron: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Matrix: AQ **Batch ID:** MP26330

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9728-1DUP, FA9728-1MS, FA9728-1MSD, FA9728-1PS, FA9728-1SDL were used as the QC samples for metals.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP22776

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9417-1MS, FA9417-1MSD were used as the QC samples for Nitrogen, Nitrate, Sulfate.

FA9420-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA9420-3 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP22829

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-1MS, FA9375-1MSD were used as the QC samples for Nitrogen, Ammonia.

Matrix Spike Recovery(s) for Nitrogen, Ammonia are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method EPA 350.1

Matrix: AQ **Batch ID:** GP22830

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9420-3MS, FA9420-3MSD were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 351.2

Matrix: AQ **Batch ID:** GP22812

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9420-3MS, FA9420-3MSD were used as the QC samples for Nitrogen, Total Kjeldahl.

Matrix Spike Recovery(s) for Nitrogen, Total Kjeldahl are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Wet Chemistry By Method SM18 3500FED

Matrix: AQ **Batch ID:** GN58481

All method blanks for this batch meet method specific criteria.

Sample(s) FA9420-3DUP was used as the QC samples for Iron, Ferrous.

FA9420-1 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

FA9420-3 for Iron, Ferrous: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SM18 3500FED M

Matrix: AQ **Batch ID:** R32357

FA9420-1 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Matrix: AQ **Batch ID:** R32358

FA9420-3 for Iron, Ferric: Calculated as: (Iron) - (Iron, Ferrous)

Wet Chemistry By Method SM18 4500/EPA 376.1

Matrix: AQ **Batch ID:** GN58738

The following samples were run outside of holding time for method SM18 4500/EPA 376.1: FA9420-1, FA9420-3. Samples analyzed beyond hold time.

Wet Chemistry By Method SM19 2540C

Matrix: AQ **Batch ID:** GN58485

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9417-5DUP was used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SM19 5210B

Matrix: AQ **Batch ID:** GP22762

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9420-3DUP was used as the QC samples for BOD, 5 Day.

Blank Spike Recovery(s) for BOD, 5 Day are outside control limits.

FA9420-1 for BOD, 5 Day: Estimated value. Result considered minimum due to low spike recovery.

FA9420-3 for BOD, 5 Day: Estimated value. Result considered minimum due to low spike recovery.

Wet Chemistry By Method SM19 5220C

Matrix: AQ **Batch ID:** GP22797

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9375-1MS, FA9375-1MSD were used as the QC samples for Chemical Oxygen Demand.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Date: November 14, 2013

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA9420
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/23/13 thru 10/24/13

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA9420-1	**SS61-MW21**					
Benzene		166	5.0	1.1	ug/l	SW846 8260B
sec-Butylbenzene		1.2	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene		2.0	1.0	0.29	ug/l	SW846 8260B
1,2-Dichloroethane		0.33 J	1.0	0.22	ug/l	SW846 8260B
m-Dichlorobenzene		1.6	1.0	0.25	ug/l	SW846 8260B
o-Dichlorobenzene		6.3	1.0	0.22	ug/l	SW846 8260B
p-Dichlorobenzene		2.2	1.0	0.20	ug/l	SW846 8260B
Ethylbenzene		130	5.0	1.5	ug/l	SW846 8260B
Isopropylbenzene		316	5.0	1.0	ug/l	SW846 8260B
n-Propylbenzene		11.7	1.0	0.23	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		8.2	2.0	0.20	ug/l	SW846 8260B
Toluene		6.6	1.0	0.20	ug/l	SW846 8260B
m,p-Xylene		45.4	2.0	0.30	ug/l	SW846 8260B
o-Xylene		2.3	1.0	0.20	ug/l	SW846 8260B
1,2-Dichlorobenzene		4.6 J	4.7	0.64	ug/l	SW846 8270D
1,3-Dichlorobenzene		1.3 J	4.7	0.72	ug/l	SW846 8270D
1,4-Dichlorobenzene		1.6 J	4.7	0.65	ug/l	SW846 8270D
TPH-GRO (C6-C10)		0.414	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C22)		0.175 J	0.23	0.093	mg/l	SW846 8015C
Iron		861	300	29	ug/l	SW846 6010C
Manganese		1400	15	0.70	ug/l	SW846 6010C
BOD, 5 Day [a]		14.8	2.0	2.0	mg/l	SM19 5210B
Chemical Oxygen Demand		39.8	20	5.3	mg/l	SM19 5220C
Hydrogen Sulfide [b]		5.1	1.0	0.50	mg/l	SM18 4500/EPA 376.1
Iron, Ferric [c]		0.44	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [d]		0.42	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Total Kjeldahl		0.93	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		5270	500	50	mg/l	SM19 2540C
Sulfate		3610	100	30	mg/l	EPA 300/SW846 9056A
FA9420-1F	**SS61-MW21**					
Manganese		1390	15	0.70	ug/l	SW846 6010C
FA9420-2	**TRIP BLANK**					
Toluene		0.22 J	1.0	0.20	ug/l	SW846 8260B
FA9420-3	**SS61-MW23**					
TPH (C10-C22)		0.121 J	0.23	0.093	mg/l	SW846 8015C
Iron		99.1 J	300	29	ug/l	SW846 6010C
Manganese		247	15	0.70	ug/l	SW846 6010C

Summary of Hits

Job Number: FA9420
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/23/13 thru 10/24/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Iron, Ferric [c]		0.060 J	0.40	0.059	mg/l	SM18 3500FED M
Iron, Ferrous [d]		0.039 J	0.10	0.030	mg/l	SM18 3500FED
Nitrogen, Nitrate [e]		1.5 J	2.5	1.3	mg/l	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl		0.78	0.53	0.17	mg/l	EPA 351.2
Solids, Total Dissolved		4860	500	50	mg/l	SM19 2540C
Sulfate		3250	100	30	mg/l	EPA 300/SW846 9056A
FA9420-3F	**SS61-MW23**					
Manganese		219	15	0.70	ug/l	SW846 6010C
FA9420-4	**TRIP BLANK**					
Toluene		0.27 J	1.0	0.20	ug/l	SW846 8260B

(a) Estimated value. Result considered minimum due to low spike recovery.
(b) Sample analyzed beyond hold time.
(c) Calculated as: (Iron) - (Iron, Ferrous)
(d) Field analysis required. Received out of hold time and analyzed by request.
(e) Dilution required due to matrix interference.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E027281.D	1	11/04/13	TD	n/a	n/a	VE922
Run #2	E027300.D	5	11/04/13	TD	n/a	n/a	VE922

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	166 [a]	5.0	1.1	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	1.2	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	2.0	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.33	1.0	0.22	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	1.6	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	6.3	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	2.2	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	130 [a]	5.0	1.5	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	316 [a]	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	11.7	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	8.2	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	6.6	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	45.4	2.0	0.30	ug/l	
95-47-6	o-Xylene	2.3	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	97%	79-125%
2037-26-5	Toluene-D8	96%	98%	85-112%
460-00-4	4-Bromofluorobenzene	101%	103%	83-118%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X031443.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.3	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.66	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.7	0.66	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.3	1.3	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.67	ug/l	
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.63	ug/l	
100-02-7	4-Nitrophenol	ND	23	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	23	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.51	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.84	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.65	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.70	ug/l	
92-87-5	Benzidine	ND	23	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.53	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.62	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.62	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.93	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.68	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.64	ug/l	
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.67	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	4.6	4.7	0.64	ug/l	J
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.60	ug/l	
541-73-1	1,3-Dichlorobenzene	1.3	4.7	0.72	ug/l	J
106-46-7	1,4-Dichlorobenzene	1.6	4.7	0.65	ug/l	J
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.64	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.75	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.54	ug/l	
132-64-9	Dibenzofuran	ND	4.7	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.7	0.93	ug/l	
117-84-0	Di-n-octyl phthalate [a]	ND	4.7	0.93	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.93	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.75	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.55	ug/l	
86-73-7	Fluorene	ND	4.7	0.71	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.64	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.89	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.74	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.69	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	0.66	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.90	ug/l	
91-20-3	Naphthalene	ND	4.7	0.59	ug/l	
98-95-3	Nitrobenzene	ND	4.7	0.67	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.79	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.93	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.66	ug/l	
129-00-0	Pyrene	ND	4.7	0.63	ug/l	
110-86-1	Pyridine	ND	9.3	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	34%		14-67%
4165-62-2	Phenol-d5	31%		10-50%
118-79-6	2,4,6-Tribromophenol	85%		33-118%
4165-60-0	Nitrobenzene-d5	87%		42-108%
321-60-8	2-Fluorobiphenyl	76%		40-106%
1718-51-0	Terphenyl-d14	88%		39-121%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124593.D	1	10/28/13	CP	n/a	n/a	GCD5086
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.414	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		70-131%
98-08-8	aaa-Trifluorotoluene	105%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38991.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.175	0.23	0.093	mg/l	J
	TPH (> C22-C36)	ND	0.23	0.093	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	861	300	29	ug/l	1	11/08/13	11/08/13	LM	SW846 6010C [1]	SW846 3010A [2]
Manganese	1400	15	0.70	ug/l	1	11/08/13	11/08/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11189
(2) Prep QC Batch: MP26295

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1	**Date Sampled:**	10/23/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	14.8	2.0	2.0	mg/l	1	10/25/13 13:20	HH	SM19 5210B
Chemical Oxygen Demand	39.8	20	5.3	mg/l	1	10/30/13 11:10	LE	SM19 5220C
Hydrogen Sulfide [b]	5.1	1.0	0.50	mg/l	1	11/07/13 08:20	LE	SM18 4500/EPA 376.1
Iron, Ferric [c]	0.44	0.40	0.059	mg/l	1	11/08/13 18:00	LM	SM18 3500FED M
Iron, Ferrous [d]	0.42	0.10	0.030	mg/l	1	10/25/13 10:55	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	11/04/13 12:45	VK	EPA 350.1
Nitrogen, Nitrate [e]	2.5 U	5.0	2.5	mg/l	50	10/25/13 11:44	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	0.93	0.53	0.17	mg/l	1	11/04/13 13:18	MG	EPA 351.2
Solids, Total Dissolved	5270	500	50	mg/l	5	10/26/13 10:45	KC	SM19 2540C
Sulfate	3610	100	30	mg/l	50	10/25/13 11:44	AA	EPA 300/SW846 9056A

(a) Estimated value. Result considered minimum due to low spike recovery.
(b) Sample analyzed beyond hold time.
(c) Calculated as: (Iron) - (Iron, Ferrous)
(d) Field analysis required. Received out of hold time and analyzed by request.
(e) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW21		
Lab Sample ID:	FA9420-1F	**Date Sampled:**	10/23/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	1390	15	0.70	ug/l	1	11/08/13	11/08/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11189
(2) Prep QC Batch: MP26295

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9420-2	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E027278.D	1	11/04/13	TD	n/a	n/a	VE922
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9420-2	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.22	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9420-2	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	94%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9420-2	**Date Sampled:**	10/23/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/25/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124575.D	1	10/28/13	CP	n/a	n/a	GCD5086
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	82%		70-131%
98-08-8	aaa-Trifluorotoluene	101%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3	**Date Sampled:**	10/24/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E027279.D	1	11/04/13	TD	n/a	n/a	VE922
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3	**Date Sampled:**	10/24/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3	**Date Sampled:**	10/24/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3	**Date Sampled:**	10/24/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U041757.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	47	9.3	ug/l	
95-57-8	2-Chlorophenol	ND	4.7	0.66	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.7	0.76	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.7	0.66	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.7	0.72	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	4.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.3	1.3	ug/l	
95-48-7	2-Methylphenol	ND	4.7	0.67	ug/l	
	3&4-Methylphenol	ND	4.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	4.7	0.63	ug/l	
100-02-7	4-Nitrophenol	ND	23	4.7	ug/l	
87-86-5	Pentachlorophenol	ND	23	4.7	ug/l	
108-95-2	Phenol	ND	4.7	0.51	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.7	0.84	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.7	0.73	ug/l	
83-32-9	Acenaphthene	ND	4.7	0.65	ug/l	
208-96-8	Acenaphthylene	ND	4.7	0.65	ug/l	
62-53-3	Aniline	ND	4.7	0.73	ug/l	
120-12-7	Anthracene	ND	4.7	0.70	ug/l	
92-87-5	Benzidine	ND	23	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	0.51	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	0.53	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	0.71	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	0.62	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	0.62	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.7	0.74	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.7	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	4.7	0.93	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.7	0.68	ug/l	
106-47-8	4-Chloroaniline	ND	4.7	0.64	ug/l	
86-74-8	Carbazole	ND	4.7	0.49	ug/l	
218-01-9	Chrysene	ND	4.7	0.55	ug/l	

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3	**Date Sampled:**	10/24/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	4.7	0.65	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.7	0.67	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.7	0.74	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.7	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.7	0.64	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.7	0.60	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.7	0.72	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.7	0.65	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.7	0.64	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.7	0.75	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.7	0.69	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	0.54	ug/l	
132-64-9	Dibenzofuran	ND	4.7	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.7	0.93	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.7	0.93	ug/l	
84-66-2	Diethyl phthalate	ND	4.7	0.93	ug/l	
131-11-3	Dimethyl phthalate	ND	4.7	0.75	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.7	1.1	ug/l	
206-44-0	Fluoranthene	ND	4.7	0.55	ug/l	
86-73-7	Fluorene	ND	4.7	0.71	ug/l	
118-74-1	Hexachlorobenzene	ND	4.7	0.64	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.7	0.89	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.7	0.74	ug/l	
67-72-1	Hexachloroethane	ND	4.7	0.69	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	0.54	ug/l	
78-59-1	Isophorone	ND	4.7	0.60	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	0.66	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.7	0.70	ug/l	
99-09-2	3-Nitroaniline	ND	4.7	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	4.7	0.90	ug/l	
91-20-3	Naphthalene	ND	4.7	0.59	ug/l	
98-95-3	Nitrobenzene	ND	4.7	0.67	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.7	0.59	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.7	0.79	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.7	0.93	ug/l	
85-01-8	Phenanthrene	ND	4.7	0.66	ug/l	
129-00-0	Pyrene	ND	4.7	0.63	ug/l	
110-86-1	Pyridine	ND	9.3	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.57	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3	**Date Sampled:**	10/24/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		14-67%
4165-62-2	Phenol-d5	30%		10-50%
118-79-6	2,4,6-Tribromophenol	96%		33-118%
4165-60-0	Nitrobenzene-d5	78%		42-108%
321-60-8	2-Fluorobiphenyl	83%		40-106%
1718-51-0	Terphenyl-d14	103%		39-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3	**Date Sampled:**	10/24/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124790.D	1	11/04/13	CP	n/a	n/a	GCD5093
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		70-131%
98-08-8	aaa-Trifluorotoluene	97%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3	**Date Sampled:**	10/24/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
Method:	SW846 8015C SW846 3510C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY39002.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433
Run #2							

	Initial Volume	Final Volume
Run #1	1070 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	0.121	0.23	0.093	mg/l	J
	TPH (> C22-C36)	ND	0.23	0.093	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		50-131%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3	**Date Sampled:**	10/24/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	99.1 J	300	29	ug/l	1	11/08/13	11/08/13	LM	SW846 6010C [1]	SW846 3010A [2]
Manganese	247	15	0.70	ug/l	1	11/08/13	11/08/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11189
(2) Prep QC Batch: MP26295

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3	**Date Sampled:**	10/24/13
Matrix:	AQ - Ground Water	**Date Received:**	10/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
BOD, 5 Day [a]	2.0 U	2.0	2.0	mg/l	1	10/25/13 13:20	HH	SM19 5210B
Chemical Oxygen Demand	5.3 U	20	5.3	mg/l	1	10/30/13 11:10	LE	SM19 5220C
Hydrogen Sulfide [b]	0.50 U	1.0	0.50	mg/l	1	11/07/13 08:20	LE	SM18 4500/EPA 376.1
Iron, Ferric [c]	0.060 J	0.40	0.059	mg/l	1	11/08/13 18:04	LM	SM18 3500FED M
Iron, Ferrous [d]	0.039 J	0.10	0.030	mg/l	1	10/25/13 10:55	LE	SM18 3500FED
Nitrogen, Ammonia	0.030 U	0.10	0.030	mg/l	1	11/04/13 13:45	VK	EPA 350.1
Nitrogen, Nitrate [e]	1.5 J	2.5	1.3	mg/l	25	10/25/13 12:00	AA	EPA 300/SW846 9056A
Nitrogen, Total Kjeldahl	0.78	0.53	0.17	mg/l	1	11/04/13 13:16	MG	EPA 351.2
Solids, Total Dissolved	4860	500	50	mg/l	5	10/26/13 10:45	KC	SM19 2540C
Sulfate	3250	100	30	mg/l	50	10/28/13 18:21	AA	EPA 300/SW846 9056A

(a) Estimated value. Result considered minimum due to low spike recovery.
(b) Sample analyzed beyond hold time.
(c) Calculated as: (Iron) - (Iron, Ferrous)
(d) Field analysis required. Received out of hold time and analyzed by request.
(e) Dilution required due to matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SS61-MW23		
Lab Sample ID:	FA9420-3F	**Date Sampled:**	10/24/13
Matrix:	AQ - Groundwater Filtered	**Date Received:**	10/25/13
		Percent Solids:	n/a
Project:	Holloman AFB; SS61 VCM		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	219	15	0.70	ug/l	1	11/13/13	11/13/13	LM	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA11202
(2) Prep QC Batch: MP26330

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9420-4	**Date Sampled:**	10/24/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E027280.D	1	11/04/13	TD	n/a	n/a	VE922
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9420-4	**Date Sampled:**	10/24/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	0.27	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9420-4	**Date Sampled:**	10/24/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9420-4	**Date Sampled:**	10/24/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/25/13
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124576.D	1	10/28/13	CP	n/a	n/a	GCD5086
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	81%		70-131%
98-08-8	aaa-Trifluorotoluene	100%		69-143%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA 9420

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 10242014-01
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
1	SS61-MW21	SS61-MW21	10/23/13	1450	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				1
2	TRIP BLANK				-	TB	1	WQ	2	X													1
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/24/13	1400	1. [signature]		
2. [signature]	10-25-13	930	2. [signature] WSP		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest Labs
Lab Recipient:
Shipped No.:
Airbill Number: 7969 8867 2195
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

2.0/1.8

5.1 5

FA9420: Chain of Custody
Page 1 of 3

FA9420

Page: 1 of 1

Project No: 9100133

COC Number(1): 10242013-03

LIMS Number:

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base

Project/Site Name: SS-61 VCM Performance Monitoring (GW - Q6, Oct 2013)

Client Name: USACE - Omaha District

Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (5)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO	FE2/FE3, SO4, TDS, NO3O	Total Mn	BOD	H2S	AMN, TKN, COD	Dissolved Mn	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
3	SS61-MW23	SS61-MW23	10/24/13	0930	-	N	1	WG	18	X	X	X	X	X	X	X	X	X	X				3
4	Trip Blank				-	TB	1	WQ	2	X													3
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS: Dissolved Mn filtered in the field

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/24/13	1400	1. [signature]		
2. [signature]	10/25/13	930	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest Labs
Lab Recipient:

Shipped No.:
Airbill Number: 7969 8867 2390
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

FA9420: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 9420 CLIENT: BHate PROJECT: SS-61

DATE/TIME RECEIVED: 10-25-13 930 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 2

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7969 8867 2195

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [x] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? 2

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 1.6 1.4
- [ ] CORRECTED TEMPS: 2.0 1.8

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE [signature] 10-25-13 REVIEWER SIGNATURE/DATE [signature] 10/25/13

NF 12/10

receipt confirmation 122910.xls

5.1

5

FA9420: Chain of Custody

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Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE922-MB	E027277.D	1	11/04/13	TD	n/a	n/a	VE922

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9420-1, FA9420-2, FA9420-3, FA9420-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE922-MB	E027277.D	1	11/04/13	TD	n/a	n/a	VE922

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9420-1, FA9420-2, FA9420-3, FA9420-4

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	0.88	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE922-MB	E027277.D	1	11/04/13	TD	n/a	n/a	VE922

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9420-1, FA9420-2, FA9420-3, FA9420-4

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	96%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE922-BS	E027275.D	1	11/04/13	TD	n/a	n/a	VE922

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9420-1, FA9420-2, FA9420-3, FA9420-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	139	111	50-147
107-02-8	Acrolein	125	88.0	70	31-154
107-13-1	Acrylonitrile	125	127	102	58-126
71-43-2	Benzene	25	28.0	112	81-122
108-86-1	Bromobenzene	25	26.9	108	80-121
74-97-5	Bromochloromethane	25	24.1	96	76-123
75-27-4	Bromodichloromethane	25	27.8	111	79-123
75-25-2	Bromoform	25	22.0	88	66-123
104-51-8	n-Butylbenzene	25	26.4	106	79-126
135-98-8	sec-Butylbenzene	25	29.2	117	83-133
98-06-6	tert-Butylbenzene	25	28.6	114	80-133
108-90-7	Chlorobenzene	25	29.1	116	82-124
75-00-3	Chloroethane	25	33.3	133	62-144
67-66-3	Chloroform	25	27.0	108	80-124
95-49-8	o-Chlorotoluene	25	31.1	124	81-127
106-43-4	p-Chlorotoluene	25	29.3	117	83-130
110-75-8	2-Chloroethyl vinyl ether	125	127	102	56-122
75-15-0	Carbon disulfide	25	24.3	97	66-148
56-23-5	Carbon tetrachloride	25	27.3	109	76-136
75-34-3	1,1-Dichloroethane	25	27.8	111	81-122
75-35-4	1,1-Dichloroethylene	25	29.7	119	78-137
563-58-6	1,1-Dichloropropene	25	30.3	121	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	24.9	100	64-123
106-93-4	1,2-Dibromoethane	25	27.2	109	75-120
107-06-2	1,2-Dichloroethane	25	26.8	107	75-125
78-87-5	1,2-Dichloropropane	25	28.4	114	76-124
142-28-9	1,3-Dichloropropane	25	27.4	110	80-118
594-20-7	2,2-Dichloropropane	25	28.5	114	74-139
124-48-1	Dibromochloromethane	25	27.0	108	78-122
75-71-8	Dichlorodifluoromethane	25	41.6	166	42-167
156-59-2	cis-1,2-Dichloroethylene	25	27.7	111	78-120
10061-01-5	cis-1,3-Dichloropropene	25	25.4	102	75-118
541-73-1	m-Dichlorobenzene	25	27.6	110	84-125
95-50-1	o-Dichlorobenzene	25	28.7	115	82-124
106-46-7	p-Dichlorobenzene	25	26.3	105	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.8	111	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE922-BS	E027275.D	1	11/04/13	TD	n/a	n/a	VE922

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9420-1, FA9420-2, FA9420-3, FA9420-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	27.5	110	80-120
100-41-4	Ethylbenzene	25	28.1	112	81-121
591-78-6	2-Hexanone	125	146	117	61-129
87-68-3	Hexachlorobutadiene	25	28.0	112	75-142
110-54-3	Hexane	25	25.3	101	69-132
98-82-8	Isopropylbenzene	25	28.3	113	83-132
99-87-6	p-Isopropyltoluene	25	27.9	112	79-130
108-10-1	4-Methyl-2-pentanone	125	139	111	66-122
74-83-9	Methyl bromide	25	34.6	138	59-143
74-87-3	Methyl chloride	25	32.9	132	50-159
74-95-3	Methylene bromide	25	26.6	106	78-119
75-09-2	Methylene chloride	25	27.8	111	69-135
78-93-3	Methyl ethyl ketone	125	125	100	56-143
1634-04-4	Methyl Tert Butyl Ether	25	24.5	98	72-117
91-20-3	Naphthalene	25	24.5	98	63-132
103-65-1	n-Propylbenzene	25	30.8	123	82-133
100-42-5	Styrene	25	25.0	100	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	27.3	109	77-122
71-55-6	1,1,1-Trichloroethane	25	27.7	111	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	25.3	101	72-120
79-00-5	1,1,2-Trichloroethane	25	26.3	105	76-119
87-61-6	1,2,3-Trichlorobenzene	25	27.1	108	68-131
96-18-4	1,2,3-Trichloropropane	25	25.5	102	77-120
120-82-1	1,2,4-Trichlorobenzene	25	24.4	98	73-129
95-63-6	1,2,4-Trimethylbenzene	25	26.1	104	79-120
108-67-8	1,3,5-Trimethylbenzene	25	27.7	111	79-120
127-18-4	Tetrachloroethylene	25	27.4	110	76-135
108-88-3	Toluene	25	27.2	109	80-120
79-01-6	Trichloroethylene	25	27.9	112	81-126
75-69-4	Trichlorofluoromethane	25	22.8	91	71-156
75-01-4	Vinyl chloride	25	31.5	126	69-159
108-05-4	Vinyl Acetate	125	128	102	43-154
	m,p-Xylene	50	61.3	123	79-126
95-47-6	o-Xylene	25	28.0	112	80-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE922-BS	E027275.D	1	11/04/13	TD	n/a	n/a	VE922

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9420-1, FA9420-2, FA9420-3, FA9420-4

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9543-9MS	E027298.D	1	11/04/13	TD	n/a	n/a	VE922
FA9543-9MSD	E027299.D	1	11/04/13	TD	n/a	n/a	VE922
FA9543-9 [a]	E027293.D	1	11/04/13	TD	n/a	n/a	VE922

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9420-1, FA9420-2, FA9420-3, FA9420-4

CAS No.	Compound	FA9543-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	44.3		125	188	115	187	114	1	50-147/21
107-02-8	Acrolein	20 U		125	10.9	9*	12.7	10*	15	31-154/29
107-13-1	Acrylonitrile	10 U		125	139	111	141	113	1	58-126/16
71-43-2	Benzene	1.0 U		25	27.6	110	27.3	109	1	81-122/14
108-86-1	Bromobenzene	1.0 U		25	25.9	104	25.9	104	0	80-121/14
74-97-5	Bromochloromethane	1.0 U		25	24.5	98	24.5	98	0	76-123/14
75-27-4	Bromodichloromethane	1.0 U		25	27.7	111	25.6	102	8	79-123/19
75-25-2	Bromoform	1.0 U		25	21.2	85	19.9	80	6	66-123/21
104-51-8	n-Butylbenzene	1.0 U		25	24.4	98	24.3	97	0	79-126/16
135-98-8	sec-Butylbenzene	1.0 U		25	26.5	106	26.4	106	0	83-133/16
98-06-6	tert-Butylbenzene	1.0 U		25	26.5	106	26.4	106	0	80-133/16
108-90-7	Chlorobenzene	1.0 U		25	28.7	115	28.4	114	1	82-124/14
75-00-3	Chloroethane	2.0 U		25	45.8	183*	35.2	141	26*	62-144/20
67-66-3	Chloroform	1.0 U		25	26.8	107	26.5	106	1	80-124/15
95-49-8	o-Chlorotoluene	1.0 U		25	30.0	120	29.7	119	1	81-127/15
106-43-4	p-Chlorotoluene	1.0 U		25	28.4	114	28.2	113	1	83-130/15
110-75-8	2-Chloroethyl vinyl ether	5.0 U		125	144	115	142	114	1	56-122/23
75-15-0	Carbon disulfide	2.0 U		25	20.9	84	18.5	74	12	66-148/23
56-23-5	Carbon tetrachloride	1.0 U		25	26.2	105	24.3	97	8	76-136/23
75-34-3	1,1-Dichloroethane	1.0 U		25	27.5	110	27.2	109	1	81-122/15
75-35-4	1,1-Dichloroethylene	1.0 U		25	28.0	112	28.3	113	1	78-137/18
563-58-6	1,1-Dichloropropene	1.0 U		25	29.4	118	29.0	116	1	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U		25	34.0	136*	32.5	130*	5	64-123/18
106-93-4	1,2-Dibromoethane	1.0 U		25	28.0	112	28.4	114	1	75-120/13
107-06-2	1,2-Dichloroethane	1.0 U		25	28.0	112	27.5	110	2	75-125/14
78-87-5	1,2-Dichloropropane	1.0 U		25	29.1	116	28.6	114	2	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U		25	28.6	114	28.7	115	0	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U		25	25.8	103	25.4	102	2	74-139/17
124-48-1	Dibromochloromethane	1.0 U		25	25.9	104	24.4	98	6	78-122/19
75-71-8	Dichlorodifluoromethane	2.0 U		25	42.3	169*	41.6	166	2	42-167/19
156-59-2	cis-1,2-Dichloroethylene	6.7		25	34.1	110	34.2	110	0	78-120/15
10061-01-5	cis-1,3-Dichloropropene	1.0 U		25	23.9	96	22.3	89	7	75-118/23
541-73-1	m-Dichlorobenzene	1.0 U		25	26.1	104	25.9	104	1	84-125/14
95-50-1	o-Dichlorobenzene	1.0 U		25	27.3	109	27.3	109	0	82-124/14
106-46-7	p-Dichlorobenzene	1.0 U		25	25.2	101	25.0	100	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U		25	27.2	109	26.7	107	2	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9543-9MS	E027298.D	1	11/04/13	TD	n/a	n/a	VE922
FA9543-9MSD	E027299.D	1	11/04/13	TD	n/a	n/a	VE922
FA9543-9 [a]	E027293.D	1	11/04/13	TD	n/a	n/a	VE922

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9420-1, FA9420-2, FA9420-3, FA9420-4

CAS No.	Compound	FA9543-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	1.0 U		25	25.8	103	24.4	98	6	80-120/22
100-41-4	Ethylbenzene	1.0 U		25	27.8	111	27.4	110	1	81-121/14
591-78-6	2-Hexanone	5.8	J	125	186	144*	189	147*	2	61-129/18
87-68-3	Hexachlorobutadiene	2.0 U		25	19.5	78	20.2	81	4	75-142/19
110-54-3	Hexane	2.0 U		25	23.8	95	22.9	92	4	69-132/20
98-82-8	Isopropylbenzene	1.0 U		25	26.8	107	26.8	107	0	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U		25	25.3	101	25.2	101	0	79-130/16
108-10-1	4-Methyl-2-pentanone	5.0 U		125	167	134*	170	136*	2	66-122/16
74-83-9	Methyl bromide	2.0 U		25	37.3	149*	34.8	139	7	59-143/19
74-87-3	Methyl chloride	2.0 U		25	30.1	120	29.3	117	3	50-159/19
74-95-3	Methylene bromide	2.0 U		25	27.7	111	27.5	110	1	78-119/14
75-09-2	Methylene chloride	5.0 U		25	27.9	112	27.4	110	2	69-135/16
78-93-3	Methyl ethyl ketone	115		125	252	110	251	109	0	56-143/18
1634-04-4	Methyl Tert Butyl Ether	1.0 U		25	25.8	103	26.2	105	2	72-117/14
91-20-3	Naphthalene	5.0 U		25	28.6	114	30.0	120	5	63-132/25
103-65-1	n-Propylbenzene	1.0 U		25	29.2	117	28.9	116	1	82-133/15
100-42-5	Styrene	1.0 U		25	24.7	99	24.6	98	0	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U		25	26.0	104	24.7	99	5	77-122/19
71-55-6	1,1,1-Trichloroethane	1.0 U		25	26.9	108	26.5	106	1	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U		25	29.0	116	29.4	118	1	72-120/14
79-00-5	1,1,2-Trichloroethane	1.0 U		25	27.4	110	27.4	110	0	76-119/14
87-61-6	1,2,3-Trichlorobenzene	1.0 U		25	25.0	100	26.0	104	4	68-131/25
96-18-4	1,2,3-Trichloropropane	2.0 U		25	28.5	114	29.0	116	2	77-120/16
120-82-1	1,2,4-Trichlorobenzene	1.0 U		25	21.5	86	22.0	88	2	73-129/20
95-63-6	1,2,4-Trimethylbenzene	2.0 U		25	24.6	98	24.3	97	1	79-120/18
108-67-8	1,3,5-Trimethylbenzene	2.0 U		25	26.1	104	26.0	104	0	79-120/19
127-18-4	Tetrachloroethylene	1.0 U		25	25.3	101	25.3	101	0	76-135/16
108-88-3	Toluene	1.0 U		25	26.3	105	26.3	105	0	80-120/14
79-01-6	Trichloroethylene	0.39	J	25	27.6	109	27.1	107	2	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U		25	21.7	87	20.5	82	6	71-156/21
75-01-4	Vinyl chloride	0.46	J	25	29.3	115	29.1	115	1	69-159/18
108-05-4	Vinyl Acetate	10 U		125	127	102	126	101	1	43-154/14
	m,p-Xylene	2.0 U		50	60.3	121	59.6	119	1	79-126/15
95-47-6	o-Xylene	1.0 U		25	27.1	108	27.1	108	0	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9543-9MS	E027298.D	1	11/04/13	TD	n/a	n/a	VE922
FA9543-9MSD	E027299.D	1	11/04/13	TD	n/a	n/a	VE922
FA9543-9 [a]	E027293.D	1	11/04/13	TD	n/a	n/a	VE922

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9420-1, FA9420-2, FA9420-3, FA9420-4

CAS No.	Surrogate Recoveries	MS	MSD	FA9543-9	Limits
1868-53-7	Dibromofluoromethane	96%	96%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	103%	99%	79-125%
2037-26-5	Toluene-D8	96%	97%	99%	85-112%
460-00-4	4-Bromofluorobenzene	99%	100%	101%	83-118%

(a) Sample was not preserved to a pH < 2.

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MB	X031433.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-1

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MB	X031433.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MB	X031433.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-1

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	76%	42-108%
321-60-8	2-Fluorobiphenyl	69%	40-106%
1718-51-0	Terphenyl-d14	80%	39-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile [a]		0	ug/l	

(a) No TICs detected.

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49243-MB	U041751.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49243-MB	U041751.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49243-MB	U041751.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-3

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	34%	14-67%
4165-62-2	Phenol-d5	21%	10-50%
118-79-6	2,4,6-Tribromophenol	67%	33-118%
4165-60-0	Nitrobenzene-d5	61%	42-108%
321-60-8	2-Fluorobiphenyl	60%	40-106%
1718-51-0	Terphenyl-d14	83%	39-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile [a]		0	ug/l	

(a) No TICs detected.

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-BS	X031432.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	18.1	18	10-69
95-57-8	2-Chlorophenol	50	37.3	75	52-98
59-50-7	4-Chloro-3-methyl phenol	50	41.1	82	54-103
120-83-2	2,4-Dichlorophenol	50	35.1	70	53-103
105-67-9	2,4-Dimethylphenol	50	34.1	68	43-90
51-28-5	2,4-Dinitrophenol	100	70.8	71	44-112
534-52-1	4,6-Dinitro-o-cresol	100	73.3	73	66-121
95-48-7	2-Methylphenol	50	34.5	69	43-90
	3&4-Methylphenol	100	68.7	69	36-88
88-75-5	2-Nitrophenol	50	37.2	74	53-102
100-02-7	4-Nitrophenol	100	31.6	32	18-62
87-86-5	Pentachlorophenol	100	83.3	83	61-115
108-95-2	Phenol	50	16.0	32	19-56
95-95-4	2,4,5-Trichlorophenol	50	43.4	87	62-109
88-06-2	2,4,6-Trichlorophenol	50	43.0	86	59-107
83-32-9	Acenaphthene	50	41.6	83	61-107
208-96-8	Acenaphthylene	50	44.5	89	60-104
62-53-3	Aniline	50	40.1	80	47-100
120-12-7	Anthracene	50	43.5	87	65-108
92-87-5	Benzidine	50	24.1	48	25-99
56-55-3	Benzo(a)anthracene	50	42.9	86	66-111
50-32-8	Benzo(a)pyrene	50	42.0	84	62-107
205-99-2	Benzo(b)fluoranthene	50	43.4	87	65-114
191-24-2	Benzo(g,h,i)perylene	50	43.9	88	66-116
207-08-9	Benzo(k)fluoranthene	50	44.3	89	65-114
101-55-3	4-Bromophenyl phenyl ether	50	34.8	70	65-109
85-68-7	Butyl benzyl phthalate	50	43.3	87	65-112
100-51-6	Benzyl Alcohol	50	36.6	73	46-94
91-58-7	2-Chloronaphthalene	50	41.5	83	57-103
106-47-8	4-Chloroaniline	50	44.6	89	49-105
86-74-8	Carbazole	50	38.8	78	59-113
218-01-9	Chrysene	50	44.7	89	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	37.5	75	51-102
111-44-4	bis(2-Chloroethyl)ether	50	39.3	79	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	38.4	77	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	34.4	69	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-BS	X031432.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	35.4	71	48-97
122-66-7	1,2-Diphenylhydrazine	50	41.5	83	61-110
541-73-1	1,3-Dichlorobenzene	50	35.6	71	45-95
106-46-7	1,4-Dichlorobenzene	50	37.5	75	45-98
121-14-2	2,4-Dinitrotoluene	50	38.1	76	61-110
606-20-2	2,6-Dinitrotoluene	50	41.9	84	63-108
91-94-1	3,3'-Dichlorobenzidine	50	42.3	85	46-117
53-70-3	Dibenzo(a,h)anthracene	50	44.1	88	66-119
132-64-9	Dibenzofuran	50	40.4	81	61-106
84-74-2	Di-n-butyl phthalate	50	40.5	81	65-107
117-84-0	Di-n-octyl phthalate	50	59.4	119*	62-118
84-66-2	Diethyl phthalate	50	36.6	73	64-108
131-11-3	Dimethyl phthalate	50	41.3	83	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	39.9	80	61-117
206-44-0	Fluoranthene	50	40.4	81	63-106
86-73-7	Fluorene	50	38.4	77	62-108
118-74-1	Hexachlorobenzene	50	40.1	80	63-108
87-68-3	Hexachlorobutadiene	50	40.7	81	42-102
77-47-4	Hexachlorocyclopentadiene	50	31.4	63	39-102
67-72-1	Hexachloroethane	50	37.0	74	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	40.8	82	64-119
78-59-1	Isophorone	50	38.0	76	43-87
90-12-0	1-Methylnaphthalene	50	41.6	83	53-102
91-57-6	2-Methylnaphthalene	50	41.5	83	51-102
88-74-4	2-Nitroaniline	50	46.4	93	54-128
99-09-2	3-Nitroaniline	50	44.3	89	56-106
100-01-6	4-Nitroaniline	50	38.0	76	55-120
91-20-3	Naphthalene	50	42.8	86	47-100
98-95-3	Nitrobenzene	50	35.2	70	50-104
62-75-9	N-Nitrosodimethylamine	50	29.1	58	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	41.0	82	52-104
86-30-6	N-Nitrosodiphenylamine	50	36.9	74	64-108
85-01-8	Phenanthrene	50	43.4	87	66-110
129-00-0	Pyrene	50	35.2	70	64-113
110-86-1	Pyridine	50	27.9	56	23-74
120-82-1	1,2,4-Trichlorobenzene	50	36.9	74	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-BS	X031432.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-1

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	73%	42-108%
321-60-8	2-Fluorobiphenyl	85%	40-106%
1718-51-0	Terphenyl-d14	81%	39-121%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49243-BS	U041750.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	15.3	15	10-69
95-57-8	2-Chlorophenol	50	31.1	62	52-98
59-50-7	4-Chloro-3-methyl phenol	50	33.6	67	54-103
120-83-2	2,4-Dichlorophenol	50	34.9	70	53-103
105-67-9	2,4-Dimethylphenol	50	31.8	64	43-90
51-28-5	2,4-Dinitrophenol	100	65.1	65	44-112
534-52-1	4,6-Dinitro-o-cresol	100	77.9	78	66-121
95-48-7	2-Methylphenol	50	27.6	55	43-90
	3&4-Methylphenol	100	55.2	55	36-88
88-75-5	2-Nitrophenol	50	35.3	71	53-102
100-02-7	4-Nitrophenol	100	25.9	26	18-62
87-86-5	Pentachlorophenol	100	87.2	87	61-115
108-95-2	Phenol	50	12.9	26	19-56
95-95-4	2,4,5-Trichlorophenol	50	39.1	78	62-109
88-06-2	2,4,6-Trichlorophenol	50	39.0	78	59-107
83-32-9	Acenaphthene	50	37.7	75	61-107
208-96-8	Acenaphthylene	50	38.6	77	60-104
62-53-3	Aniline	50	32.0	64	47-100
120-12-7	Anthracene	50	39.3	79	65-108
92-87-5	Benzidine	50	32.3	65	25-99
56-55-3	Benzo(a)anthracene	50	38.7	77	66-111
50-32-8	Benzo(a)pyrene	50	37.9	76	62-107
205-99-2	Benzo(b)fluoranthene	50	39.1	78	65-114
191-24-2	Benzo(g,h,i)perylene	50	40.9	82	66-116
207-08-9	Benzo(k)fluoranthene	50	42.6	85	65-114
101-55-3	4-Bromophenyl phenyl ether	50	33.2	66	65-109
85-68-7	Butyl benzyl phthalate	50	37.6	75	65-112
100-51-6	Benzyl Alcohol	50	33.6	67	46-94
91-58-7	2-Chloronaphthalene	50	35.6	71	57-103
106-47-8	4-Chloroaniline	50	37.6	75	49-105
86-74-8	Carbazole	50	38.4	77	59-113
218-01-9	Chrysene	50	41.3	83	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	35.4	71	51-102
111-44-4	bis(2-Chloroethyl)ether	50	31.7	63	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	32.7	65	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	36.0	72	62-105

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49243-BS	U041750.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	27.7	55	48-97
122-66-7	1,2-Diphenylhydrazine	50	37.4	75	61-110
541-73-1	1,3-Dichlorobenzene	50	27.4	55	45-95
106-46-7	1,4-Dichlorobenzene	50	29.8	60	45-98
121-14-2	2,4-Dinitrotoluene	50	36.0	72	61-110
606-20-2	2,6-Dinitrotoluene	50	36.3	73	63-108
91-94-1	3,3'-Dichlorobenzidine	50	42.0	84	46-117
53-70-3	Dibenzo(a,h)anthracene	50	41.0	82	66-119
132-64-9	Dibenzofuran	50	38.5	77	61-106
84-74-2	Di-n-butyl phthalate	50	35.7	71	65-107
117-84-0	Di-n-octyl phthalate	50	35.5	71	62-118
84-66-2	Diethyl phthalate	50	35.8	72	64-108
131-11-3	Dimethyl phthalate	50	35.3	71	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	37.7	75	61-117
206-44-0	Fluoranthene	50	37.8	76	63-106
86-73-7	Fluorene	50	38.6	77	62-108
118-74-1	Hexachlorobenzene	50	39.1	78	63-108
87-68-3	Hexachlorobutadiene	50	32.3	65	42-102
77-47-4	Hexachlorocyclopentadiene	50	24.3	49	39-102
67-72-1	Hexachloroethane	50	28.0	56	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	38.3	77	64-119
78-59-1	Isophorone	50	33.2	66	43-87
90-12-0	1-Methylnaphthalene	50	34.4	69	53-102
91-57-6	2-Methylnaphthalene	50	34.3	69	51-102
88-74-4	2-Nitroaniline	50	38.2	76	54-128
99-09-2	3-Nitroaniline	50	37.5	75	56-106
100-01-6	4-Nitroaniline	50	38.4	77	55-120
91-20-3	Naphthalene	50	35.1	70	47-100
98-95-3	Nitrobenzene	50	33.3	67	50-104
62-75-9	N-Nitrosodimethylamine	50	19.7	39	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	34.2	68	52-104
86-30-6	N-Nitrosodiphenylamine	50	38.5	77	64-108
85-01-8	Phenanthrene	50	39.7	79	66-110
129-00-0	Pyrene	50	39.9	80	64-113
110-86-1	Pyridine	50	20.5	41	23-74
120-82-1	1,2,4-Trichlorobenzene	50	30.2	60	45-97

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49243-BS	U041750.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-3

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	40%	14-67%
4165-62-2	Phenol-d5	25%	10-50%
118-79-6	2,4,6-Tribromophenol	83%	33-118%
4165-60-0	Nitrobenzene-d5	68%	42-108%
321-60-8	2-Fluorobiphenyl	74%	40-106%
1718-51-0	Terphenyl-d14	86%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MS	X031438.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
OP49235-MSD	X031439.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
JB51050-7	X031437.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-1

CAS No.	Compound	JB51050-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		208	79.4	38	81.2	39	2	10-69/39
95-57-8	2-Chlorophenol	ND		104	78.5	75	74.8	72	5	52-98/25
59-50-7	4-Chloro-3-methyl phenol	ND		104	83.2	80	87.9	84	5	54-103/23
120-83-2	2,4-Dichlorophenol	ND		104	82.7	79	85.0	82	3	53-103/26
105-67-9	2,4-Dimethylphenol	ND		104	82.7	79	85.8	82	4	43-90/27
51-28-5	2,4-Dinitrophenol	ND		208	111	53	112	54	1	44-112/25
534-52-1	4,6-Dinitro-o-cresol	ND		208	134	64*	138	66	3	66-121/23
95-48-7	2-Methylphenol	ND		104	85.5	82	75.7	73	12	43-90/28
	3&4-Methylphenol	ND		208	174	84	154	74	12	36-88/28
88-75-5	2-Nitrophenol	ND		104	83.3	80	86.4	83	4	53-102/29
100-02-7	4-Nitrophenol	ND		208	102	49	114	55	11	18-62/33
87-86-5	Pentachlorophenol	ND		208	162	78	168	81	4	61-115/26
108-95-2	Phenol	ND		104	54.7	53	52.6	50	4	19-56/35
95-95-4	2,4,5-Trichlorophenol	ND		104	82.2	79	83.7	80	2	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		104	80.3	77	81.9	79	2	59-107/23
83-32-9	Acenaphthene	0.77	J	104	85.9	82	87.0	83	1	61-107/22
208-96-8	Acenaphthylene	ND		104	86.2	83	86.9	83	1	60-104/22
62-53-3	Aniline	ND		104	103	99	51.8	50	66*	47-100/30
120-12-7	Anthracene	ND		104	88.4	85	92.2	89	4	65-108/20
56-55-3	Benzo(a)anthracene	ND		104	86.1	83	91.2	88	6	66-111/22
50-32-8	Benzo(a)pyrene	ND		104	82.7	79	87.3	84	5	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		104	87.2	84	92.3	89	6	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		104	85.1	82	90.0	86	6	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		104	83.9	81	90.5	87	8	65-114/24
101-55-3	4-Bromophenyl phenyl ether	ND		104	72.5	70	76.6	74	5	65-109/23
85-68-7	Butyl benzyl phthalate	ND		104	85.2	82	90.7	87	6	65-112/24
100-51-6	Benzyl Alcohol	ND		104	79.3	76	72.5	70	9	46-94/27
91-58-7	2-Chloronaphthalene	ND		104	79.8	77	80.6	77	1	57-103/23
106-47-8	4-Chloroaniline	ND		104	64.0	61	75.4	72	16	49-105/27
86-74-8	Carbazole	ND		104	86.1	83	90.0	86	4	59-113/21
218-01-9	Chrysene	ND		104	89.3	86	93.9	90	5	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	ND		104	84.2	81	86.8	83	3	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		104	172	165*	92.9	89	60*	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		104	87.4	84	79.7	77	9	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	ND		104	79.9	77	81.4	78	2	62-105/20
95-50-1	1,2-Dichlorobenzene	ND		104	81.1	78	73.6	71	10	48-97/24

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MS	X031438.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
OP49235-MSD	X031439.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
JB51050-7	X031437.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-1

CAS No.	Compound	JB51050-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
122-66-7	1,2-Diphenylhydrazine	ND		104	83.4	80	86.5	83	4	61-110/24
541-73-1	1,3-Dichlorobenzene	ND		104	75.1	72	75.4	72	0	45-95/25
106-46-7	1,4-Dichlorobenzene	ND		104	75.4	72	78.5	75	4	45-98/25
121-14-2	2,4-Dinitrotoluene	ND		104	79.7	77	81.9	79	3	61-110/21
606-20-2	2,6-Dinitrotoluene	ND		104	79.6	72	82.5	75	4	63-108/21
53-70-3	Dibenzo(a,h)anthracene	ND		104	88.8	85	95.5	92	7	66-119/24
132-64-9	Dibenzofuran	ND		104	83.5	80	85.1	82	2	61-106/21
84-74-2	Di-n-butyl phthalate	ND		104	83.1	80	87.7	84	5	65-107/21
117-84-0	Di-n-octyl phthalate	ND		104	90.8	87	95.9	92	5	62-118/24
84-66-2	Diethyl phthalate	ND		104	82.9	80	86.0	83	4	64-108/21
131-11-3	Dimethyl phthalate	ND		104	78.8	76	81.0	78	3	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND		104	87.6	84	92.8	89	6	61-117/23
206-44-0	Fluoranthene	ND		104	87.8	84	91.0	87	4	63-106/21
86-73-7	Fluorene	ND		104	88.2	85	90.5	87	3	62-108/20
118-74-1	Hexachlorobenzene	ND		104	83.0	80	88.4	85	6	63-108/22
87-68-3	Hexachlorobutadiene	ND		104	85.1	82	86.8	83	2	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND		104	60.0	58	58.8	56	2	39-102/29
67-72-1	Hexachloroethane	ND		104	83.4	80	77.0	74	8	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		104	80.0	77	86.6	83	8	64-119/24
78-59-1	Isophorone	ND		104	81.1	78	83.6	80	3	43-87/25
90-12-0	1-Methylnaphthalene	ND		104	83.5	80	86.3	83	3	53-102/27
91-57-6	2-Methylnaphthalene	ND		104	83.1	80	84.0	81	1	51-102/26
88-74-4	2-Nitroaniline	ND		104	91.5	88	91.4	88	0	54-128/24
99-09-2	3-Nitroaniline	ND		104	64.7	62	73.8	71	13	56-106/27
100-01-6	4-Nitroaniline	ND		104	62.0	60	73.4	70	17	55-120/24
91-20-3	Naphthalene	ND		104	86.6	83	89.7	86	4	47-100/29
98-95-3	Nitrobenzene	ND		104	80.0	77	82.4	79	3	50-104/28
62-75-9	N-Nitrosodimethylamine	ND		104	63.7	61	65.1	62	2	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	ND		104	84.4	81	73.8	71	13	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND		104	84.2	81	88.9	85	5	64-108/23
85-01-8	Phenanthrene	ND		104	88.2	85	92.0	88	4	66-110/21
129-00-0	Pyrene	ND		104	83.1	80	89.5	86	7	64-113/23
110-86-1	Pyridine	ND		104	50.7	49	57.3	55	12	23-74/34
120-82-1	1,2,4-Trichlorobenzene	ND		104	79.4	76	80.4	77	1	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49235-MS	X031438.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
OP49235-MSD	X031439.D	1	11/05/13	FS	10/30/13	OP49235	SX1492
JB51050-7	X031437.D	1	11/05/13	FS	10/30/13	OP49235	SX1492

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-1

CAS No.	Surrogate Recoveries	MS	MSD	JB51050-7	Limits
4165-60-0	Nitrobenzene-d5	80%	81%	85%	42-108%
321-60-8	2-Fluorobiphenyl	77%	77%	73%	40-106%
1718-51-0	Terphenyl-d14	85%	91%	84%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49243-MS	U041758.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942
OP49243-MSD	U041759.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942
FA9420-3	U041757.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-3

CAS No.	Compound	FA9420-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		189	69.4	37	73.5	39	6	10-69/39
95-57-8	2-Chlorophenol	ND		94.3	58.6	62	53.0	56	10	52-98/25
59-50-7	4-Chloro-3-methyl phenol	ND		94.3	65.7	70	62.4	66	5	54-103/23
120-83-2	2,4-Dichlorophenol	ND		94.3	66.1	70	60.3	64	9	53-103/26
105-67-9	2,4-Dimethylphenol	ND		94.3	59.3	63	55.4	59	7	43-90/27
51-28-5	2,4-Dinitrophenol	ND		189	142	75	139	74	2	44-112/25
534-52-1	4,6-Dinitro-o-cresol	ND		189	151	80	149	79	1	66-121/23
95-48-7	2-Methylphenol	ND		94.3	57.9	61	53.4	57	8	43-90/28
	3&4-Methylphenol	ND		189	122	65	116	61	5	36-88/28
88-75-5	2-Nitrophenol	ND		94.3	64.4	68	58.6	62	9	53-102/29
100-02-7	4-Nitrophenol	ND		189	74.8	40	85.9	46	14	18-62/33
87-86-5	Pentachlorophenol	ND		189	167	89	169	90	1	61-115/26
108-95-2	Phenol	ND		94.3	35.3	37	37.2	39	5	19-56/35
95-95-4	2,4,5-Trichlorophenol	ND		94.3	73.6	78	69.1	73	6	62-109/22
88-06-2	2,4,6-Trichlorophenol	ND		94.3	73.0	77	67.6	72	8	59-107/23
83-32-9	Acenaphthene	ND		94.3	71.5	76	67.2	71	6	61-107/22
208-96-8	Acenaphthylene	ND		94.3	73.0	77	69.2	73	5	60-104/22
62-53-3	Aniline	ND		94.3	61.6	65	57.0	60	8	47-100/30
120-12-7	Anthracene	ND		94.3	74.7	79	73.6	78	1	65-108/20
92-87-5	Benzidine	ND		94.3	45.5	48	43.4	46	5	25-99/31
56-55-3	Benzo(a)anthracene	ND		94.3	71.9	76	72.0	76	0	66-111/22
50-32-8	Benzo(a)pyrene	ND		94.3	70.5	75	70.6	75	0	62-107/23
205-99-2	Benzo(b)fluoranthene	ND		94.3	73.9	78	74.7	79	1	65-114/23
191-24-2	Benzo(g,h,i)perylene	ND		94.3	76.0	81	77.2	82	2	66-116/23
207-08-9	Benzo(k)fluoranthene	ND		94.3	78.1	83	76.6	81	2	65-114/24
101-55-3	4-Bromophenyl phenyl ether	ND		94.3	63.8	68	60.7	64*	5	65-109/23
85-68-7	Butyl benzyl phthalate	ND		94.3	70.4	75	70.1	74	0	65-112/24
100-51-6	Benzyl Alcohol	ND		94.3	72.7	77	66.9	71	8	46-94/27
91-58-7	2-Chloronaphthalene	ND		94.3	67.7	72	62.3	66	8	57-103/23
106-47-8	4-Chloroaniline	ND		94.3	67.7	72	61.9	66	9	49-105/27
86-74-8	Carbazole	ND		94.3	72.2	77	70.7	75	2	59-113/21
218-01-9	Chrysene	ND		94.3	76.9	82	77.2	82	0	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	ND		94.3	63.8	68	58.4	62	9	51-102/28
111-44-4	bis(2-Chloroethyl)ether	ND		94.3	59.4	63	52.6	56	12	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		94.3	61.5	65	56.0	59	9	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	ND		94.3	68.0	72	65.6	70	4	62-105/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49243-MS	U041758.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942
OP49243-MSD	U041759.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942
FA9420-3	U041757.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-3

CAS No.	Compound	FA9420-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		94.3	55.6	59	51.8	55	7	48-97/24
122-66-7	1,2-Diphenylhydrazine	ND		94.3	69.2	73	67.8	72	2	61-110/24
541-73-1	1,3-Dichlorobenzene	ND		94.3	54.4	58	51.4	54	6	45-95/25
106-46-7	1,4-Dichlorobenzene	ND		94.3	57.6	61	53.3	56	8	45-98/25
121-14-2	2,4-Dinitrotoluene	ND		94.3	68.8	73	68.1	72	1	61-110/21
606-20-2	2,6-Dinitrotoluene	ND		94.3	68.6	73	66.2	70	4	63-108/21
91-94-1	3,3'-Dichlorobenzidine	ND		94.3	74.2	79	75.1	80	1	46-117/29
53-70-3	Dibenzo(a,h)anthracene	ND		94.3	75.9	80	77.0	82	1	66-119/24
132-64-9	Dibenzofuran	ND		94.3	72.6	77	68.4	73	6	61-106/21
84-74-2	Di-n-butyl phthalate	ND		94.3	68.1	72	68.1	72	0	65-107/21
117-84-0	Di-n-octyl phthalate	ND		94.3	68.6	73	67.7	72	1	62-118/24
84-66-2	Diethyl phthalate	ND		94.3	68.7	73	67.2	71	2	64-108/21
131-11-3	Dimethyl phthalate	ND		94.3	67.5	72	66.1	70	2	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND		94.3	70.6	75	70.7	75	0	61-117/23
206-44-0	Fluoranthene	ND		94.3	72.3	77	71.6	76	1	63-106/21
86-73-7	Fluorene	ND		94.3	72.8	77	70.6	75	3	62-108/20
118-74-1	Hexachlorobenzene	ND		94.3	74.7	79	72.7	77	3	63-108/22
87-68-3	Hexachlorobutadiene	ND		94.3	62.7	66	59.3	63	6	42-102/28
77-47-4	Hexachlorocyclopentadiene	ND		94.3	48.2	51	47.3	50	2	39-102/29
67-72-1	Hexachloroethane	ND		94.3	57.4	61	54.3	58	6	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND		94.3	72.3	77	72.5	77	0	64-119/24
78-59-1	Isophorone	ND		94.3	62.3	66	56.9	60	9	43-87/25
90-12-0	1-Methylnaphthalene	ND		94.3	65.2	69	60.2	64	8	53-102/27
91-57-6	2-Methylnaphthalene	ND		94.3	63.5	67	58.0	61	9	51-102/26
88-74-4	2-Nitroaniline	ND		94.3	72.1	76	68.4	73	5	54-128/24
99-09-2	3-Nitroaniline	ND		94.3	69.4	74	67.8	72	2	56-106/27
100-01-6	4-Nitroaniline	ND		94.3	72.2	77	71.4	76	1	55-120/24
91-20-3	Naphthalene	ND		94.3	65.6	70	60.5	64	8	47-100/29
98-95-3	Nitrobenzene	ND		94.3	59.4	63	55.9	59	6	50-104/28
62-75-9	N-Nitrosodimethylamine	ND		94.3	46.7	50	48.8	52	4	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	ND		94.3	64.0	68	58.6	62	9	52-104/25
86-30-6	N-Nitrosodiphenylamine	ND		94.3	72.8	77	71.5	76	2	64-108/23
85-01-8	Phenanthrene	ND		94.3	75.2	80	74.0	78	2	66-110/21
129-00-0	Pyrene	ND		94.3	72.6	77	72.5	77	0	64-113/23
110-86-1	Pyridine	ND		94.3	48.3	51	46.7	50	3	23-74/34
120-82-1	1,2,4-Trichlorobenzene	ND		94.3	58.3	62	55.2	59	5	45-97/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49243-MS	U041758.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942
OP49243-MSD	U041759.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942
FA9420-3	U041757.D	1	11/01/13	NAF	10/31/13	OP49243	SU1942

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9420-3

CAS No.	Surrogate Recoveries	MS	MSD	FA9420-3	Limits
367-12-4	2-Fluorophenol	48%	48%	45%	14-67%
4165-62-2	Phenol-d5	37%	39%	30%	10-50%
118-79-6	2,4,6-Tribromophenol	82%	79%	96%	33-118%
4165-60-0	Nitrobenzene-d5	67%	61%	78%	42-108%
321-60-8	2-Fluorobiphenyl	71%	66%	83%	40-106%
1718-51-0	Terphenyl-d14	81%	81%	103%	39-121%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5086-MB	CD124574.D	1	10/28/13	CP	n/a	n/a	GCD5086

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9420-1, FA9420-2, FA9420-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	80%	70-131%
98-08-8	aaa-Trifluorotoluene	95%	69-143%

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5093-MB	CD124784.D	1	11/04/13	CP	n/a	n/a	GCD5093

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9420-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	56-149%
98-08-8	aaa-Trifluorotoluene	95%	66-132%

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5086-BS	CD124573.D	1	10/28/13	CP	n/a	n/a	GCD5086

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9420-1, FA9420-2, FA9420-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.447	112	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	101%	70-131%
98-08-8	aaa-Trifluorotoluene	108%	69-143%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5093-BS	CD124783.D	1	11/04/13	CP	n/a	n/a	GCD5093

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9420-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.430	108	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	102%	56-149%
98-08-8	aaa-Trifluorotoluene	107%	66-132%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9395-3MS	CD124585.D	1	10/28/13	CP	n/a	n/a	GCD5086
FA9395-3MSD	CD124586.D	1	10/28/13	CP	n/a	n/a	GCD5086
FA9395-3	CD124581.D	1	10/28/13	CP	n/a	n/a	GCD5086

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9420-1, FA9420-2, FA9420-4

CAS No.	Compound	FA9395-3 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		0.4	0.474	119	0.470	118	1	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA9395-3	Limits
460-00-4	4-Bromofluorobenzene	91%	86%	78%	70-131%
98-08-8	aaa-Trifluorotoluene	103%	111%	98%	69-143%

8.3.1

8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9506-2MS	CD124794.D	1	11/04/13	CP	n/a	n/a	GCD5093
FA9506-2MSD	CD124795.D	1	11/04/13	CP	n/a	n/a	GCD5093
FA9506-2	CD124791.D	1	11/04/13	CP	n/a	n/a	GCD5093

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9420-3

CAS No.	Compound	FA9506-2 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		0.4	0.429	107	0.424	106	1	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA9506-2	Limits
460-00-4	4-Bromofluorobenzene	103%	102%	95%	70-131%
98-08-8	aaa-Trifluorotoluene	105%	108%	97%	69-143%

8.3.2

8

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49233-MB	YY38986.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9420-1, FA9420-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	0.25	0.10	mg/l	
	TPH (> C22-C36)	ND	0.25	0.10	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	101%	50-131%

Blank Spike Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49233-BS	YY38985.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9420-1, FA9420-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C22)	1	0.740	74	56-123
	TPH (> C22-C36)	1	0.787	79	61-143

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	98%	50-131%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9420
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49233-MS	YY39000.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433
OP49233-MSD	YY39001.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433
FA9420-1	YY38991.D	1	11/06/13	SJL	10/30/13	OP49233	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9420-1, FA9420-3

CAS No.	Compound	FA9420-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	0.175	J	1.89	1.76	84	1.92	92	9	56-123/33
	TPH (> C22-C36)	ND		1.89	1.68	89	1.70	90	1	61-143/30

CAS No.	Surrogate Recoveries	MS	MSD	FA9420-1	Limits
84-15-1	o-Terphenyl	117%	123%	102%	50-131%

9.3.1

9

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26295
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:					11/08/13		11/08/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	15	15				
Antimony	6.0	1.3	1.3				
Arsenic	10	1.6	2.5				
Barium	200	1	1				
Beryllium	4.0	.5	.5				
Cadmium	5.0	.5	.5				
Calcium	1000	50	50				
Chromium	10	1.8	2				
Cobalt	50	.5	.5				
Copper	25	1	1				
Iron	300	29	29	-3.7	<300	-3.3	<300
Lead	5.0	1.1	1.1				
Magnesium	5000	74	74				
Manganese	15	.7	.7	0.0	<15	0.0	<15
Molybdenum	50	.6	1				
Nickel	40	.5	.5				
Potassium	10000	200	200				
Selenium	10	2	2				
Silver	10	.5	.5				
Sodium	10000	500	500				
Strontium	10	.5	.5				
Thallium	10	1.3	1.3				
Tin	50	.7	1.8				
Titanium	10	.9	1				
Vanadium	50	.5	1				
Zinc	20	3	5				

Associated samples MP26295: FA9420-1, FA9420-3, FA9420-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26295
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:			11/08/13					11/08/13	
Metal	JB51267-4 Original	DUP	RPD	QC Limits	JB51267-4 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	anr								
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron	61100	57100	6.8	0-20	61100	78000	26000	65.0N(b)	80-120
Lead	anr								
Magnesium									
Manganese	16800	16100(a)	4.3	0-20	16800	15800(a)	500	-200.0(c	80-120
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

Associated samples MP26295: FA9420-1, FA9420-3, FA9420-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Above linear range. For QC purposes only.
(b) Spike recovery indicates possible matrix interference.
(c) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26295
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/08/13

Metal	JB51267-4 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron	61100	76300	26000	58.5N(a)	2.2	20
Lead	anr					
Magnesium						
Manganese	16800	15600(b)	500	-240.0(c	1.3	20
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	anr					

Associated samples MP26295: FA9420-1, FA9420-3, FA9420-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference.
(b) Above linear range. For QC purposes only.
(c) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26295
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/08/13

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron	26100	26000	100.4	80-120
Lead	anr			
Magnesium				
Manganese	523	500	104.6	80-120
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP26295: FA9420-1, FA9420-3, FA9420-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26295
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/08/13

Metal	JB51267-4 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron	61100	64600	5.8	0-10
Lead	anr			
Magnesium				
Manganese	16800	19000	13.2*(a)	0-10
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP26295: FA9420-1, FA9420-3, FA9420-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26295
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/08/13

Metal	Sample ml	Final ml	JB51267-4 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	9.8	10	61080	59858.4	61680	0.2	150	3000	60.7*(a)	80-120
Lead										
Magnesium										
Manganese	9.8	10	16770	16434.6	16480	0.2	2.5	50	90.8	80-120
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP26295: FA9420-1, FA9420-3, FA9420-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26330
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:					11/13/13		11/13/13
Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	15	15				
Antimony	6.0	1.3	1.3				
Arsenic	10	1.6	2.5				
Barium	200	1	1				
Beryllium	4.0	.5	.5				
Cadmium	5.0	.5	.5				
Calcium	1000	50	50				
Chromium	10	1.8	2				
Cobalt	50	.5	.5				
Copper	25	1	1				
Iron	300	29	29				
Lead	5.0	1.1	1.1				
Magnesium	5000	74	74				
Manganese	15	.7	.7	0.40	<15	0.20	<15
Molybdenum	50	.6	1				
Nickel	40	.5	.5				
Potassium	10000	200	200				
Selenium	10	2	2				
Silver	10	.5	.5				
Sodium	10000	500	500				
Strontium	10	.5	.5				
Thallium	10	1.3	1.3				
Tin	50	.7	1.8				
Titanium	10	.9	1				
Vanadium	50	.5	1				
Zinc	20	3	5				

Associated samples MP26330: FA9420-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26330
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Metal	FA9728-1 Original	DUP	RPD	QC Limits	FA9728-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Prep Date:			11/13/13					11/13/13	
Aluminum									
Antimony	anr								
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron	anr								
Lead	anr								
Magnesium									
Manganese	17.3	18.0	4.0	0-20	17.3	524	500	101.3	80-120
Molybdenum									
Nickel	anr								
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc									

Associated samples MP26330: FA9420-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26330
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/13/13

Metal	FA9728-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron	anr					
Lead	anr					
Magnesium						
Manganese	17.3	515	500	99.5	1.7	20
Molybdenum						
Nickel	anr					
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc						

Associated samples MP26330: FA9420-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26330
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/13/13

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron	anr			
Lead	anr			
Magnesium				
Manganese	491	500	98.2	80-120
Molybdenum				
Nickel	anr			
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc				

Associated samples MP26330: FA9420-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26330
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/13/13

Metal	FA9728-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron	anr			
Lead	anr			
Magnesium				
Manganese	17.3	16.8	2.9	0-10
Molybdenum				
Nickel	anr			
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc				

Associated samples MP26330: FA9420-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

QC Batch ID: MP26330
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/13/13

Metal	Sample ml	Final ml	FA9728-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese	9.8	10	17.3	16.954	67.6	0.2	2.5	50	101.3	80-120
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP26330: FA9420-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP22762/GN58557	2.0	0.0	mg/l	198	146	73.6*(a)	85-115%
Chemical Oxygen Demand	GP22797/GN58560	20	0.0	mg/l	50.0	49.7	99.4	87-122%
Chloride	GP22776/GN58497	2.0	0.0	mg/l	50	49.5	99.0	90-110%
Iron, Ferrous	GN58481	0.10	0.0	mg/l	.500	0.47	94.7	82-115%
Nitrogen, Ammonia	GP22829/GN58657	0.10	0.0	mg/l	2.5	2.62	104.8	90-110%
Nitrogen, Ammonia	GP22830/GN58660	0.10	0.0	mg/l	2.5	2.67	106.8	90-110%
Nitrogen, Nitrate	GP22776/GN58497	0.10	0.0	mg/l	2.5	2.47	98.8	90-110%
Nitrogen, Total Kjeldahl	GP22812/GN58652	0.53	0.0	mg/l	2.63	2.86	109.0	90-110%
Solids, Total Dissolved	GN58485	100	0.0	mg/l				
Sulfate	GP22776/GN58497	2.0	0.0	mg/l	50	49.4	98.8	90-110%

Associated Samples:
Batch GN58481: FA9420-1, FA9420-3
Batch GN58485: FA9420-1, FA9420-3
Batch GP22762: FA9420-1, FA9420-3
Batch GP22776: FA9420-1, FA9420-3
Batch GP22797: FA9420-1, FA9420-3
Batch GP22812: FA9420-1, FA9420-3
Batch GP22829: FA9420-1
Batch GP22830: FA9420-3
(*) Outside of QC limits
(a) Spike recovery outside of acceptable QC criteria.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP22762/GN58557	FA9420-3	mg/l	2.0 U	0.0	0.0	0-30%
Iron, Ferrous	GN58481	FA9420-3	mg/l	0.039	0.039	0.0	0-31%
Solids, Total Dissolved	GN58485	FA9417-5	mg/l	375	378	0.8	0-5%

Associated Samples:
Batch GN58481: FA9420-1, FA9420-3
Batch GN58485: FA9420-1, FA9420-3
Batch GP22762: FA9420-1, FA9420-3
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP22797/GN58560	FA9375-1	mg/l	14.9	50.0	62.1	94.4	87-122%
Chloride	GP22776/GN58497	FA9417-1	mg/l	3.7	50	52.1	96.8	90-110%
Nitrogen, Ammonia	GP22829/GN58657	FA9375-1	mg/l	0.030 U	2.5	2.8	112.0N(a)	90-110%
Nitrogen, Ammonia	GP22830/GN58660	FA9420-3	mg/l	0.030 U	2.5	2.6	104.0	90-110%
Nitrogen, Nitrate	GP22776/GN58497	FA9417-1	mg/l	0.32	2.5	2.9	103.2	90-110%
Nitrogen, Total Kjeldahl	GP22812/GN58652	FA9420-3	mg/l	0.78	2.63	3.9	118.9N(b)	90-110%
Sulfate	GP22776/GN58497	FA9417-1	mg/l	0.80	50	49.7	97.8	90-110%

Associated Samples:
Batch GP22776: FA9420-1, FA9420-3
Batch GP22797: FA9420-1, FA9420-3
Batch GP22812: FA9420-1, FA9420-3
Batch GP22829: FA9420-1
Batch GP22830: FA9420-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.
(b) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA9420
Account: BHATALB - Bhate Environmental
Project: Holloman AFB; SS61 VCM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chemical Oxygen Demand	GP22797/GN58560	FA9375-1	mg/l	14.9	50.0	62.1	0.0	26%
Chloride	GP22776/GN58497	FA9417-1	mg/l	3.7	50	52.5	0.8	20%
Nitrogen, Ammonia	GP22829/GN58657	FA9375-1	mg/l	0.030 U	2.5	2.8	0.0	20%
Nitrogen, Ammonia	GP22830/GN58660	FA9420-3	mg/l	0.030 U	2.5	2.6	0.0	20%
Nitrogen, Nitrate	GP22776/GN58497	FA9417-1	mg/l	0.32	2.5	2.8	3.5	20%
Nitrogen, Total Kjeldahl	GP22812/GN58652	FA9420-3	mg/l	0.78	2.63	3.9	0.0	20%
Sulfate	GP22776/GN58497	FA9417-1	mg/l	0.80	50	49.7	0.0	20%

Associated Samples:
Batch GP22776: FA9420-1, FA9420-3
Batch GP22797: FA9420-1, FA9420-3
Batch GP22812: FA9420-1, FA9420-3
Batch GP22829: FA9420-1
Batch GP22830: FA9420-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Southeast ACCUTEST LABORATORIES

11/13/13

Technical Report for

Bhate Environmental

Holloman AFB; SS61 VCM

9100133

Accutest Job Number: FA9421

Sampling Date: 10/23/13

Report to:

Bhate Environmental Associates, Inc.

dmcneil@bhate.com

ATTN: Dustin McNeil

Total number of pages in report: **75**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Jean Dent-Smith 407-425-6700

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Sample Summary

Bhate Environmental

Job No: FA9421

Holloman AFB; SS61 VCM
Project No: 9100133

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA9421-1	10/23/13	13:15	DMZB	10/25/13	SO	Soil	SS61-SB74C-28
FA9421-2	10/23/13	14:45	DMZB	10/25/13	SO	Soil	SS61-SB76C-30
FA9421-3	10/23/13	00:00	DMZB	10/25/13	SO	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FA9421

Site: Holloman AFB; SS61 VCM **Report Date** 11/12/2013 8:08:15 PM

2 Samples and 1 Trip Blank were collected on 10/23/2013 and were received at Accutest SE on 10/25/2013 properly preserved, at 2 Deg. C and intact. These Samples received an Accutest job number of FA9421. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO **Batch ID:** VG3295

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9398-201MS, FA9398-201MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Acrolein, Hexachlorobutadiene, Naphthalene, Vinyl Acetate are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Hexachlorobutadiene, Naphthalene, Vinyl Acetate are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix: SO **Batch ID:** VH3126

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9376-3MS, FA9376-3MSD were used as the QC samples indicated.

Blank Spike Recovery(s) for Vinyl chloride are outside control limits. Sporadic marginal failure.

Matrix Spike Recovery(s) for 1,2-Dibromo-3-chloropropane, 2,2-Dichloropropane, Acrolein, Bromodichloromethane, cis-1,3-Dichloropropene, tert-Butylbenzene are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,1,2-Trichloroethane, 1,2,3-Trichloropropane, 1,2-Dibromo-3-chloropropane, 2,2-Dichloropropane, Acrolein, Bromodichloromethane, Carbon disulfide, cis-1,3-Dichloropropene, Dichlorodifluoromethane, Hexachlorobutadiene, Hexane, tert-Butylbenzene are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for 1,2-Dibromo-3-chloropropane, 2,2-Dichloropropane, cis-1,3-Dichloropropene, Dichlorodifluoromethane are outside control limits for sample FA9376-3MSD. Probable cause is due to sample non-homogeneity.

FA9421-3 for Vinyl chloride: Associated BS recovery outside control limits.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP49307

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9421-1MS, FA9421-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Benzoic Acid, Hexachlorocyclopentadiene, Hexachloroethane are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2,4-Dinitrophenol, 2-Nitrophenol, 4,6-Dinitro-o-cresol, 4-Bromophenyl phenyl ether, Benzoic Acid, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for 2,4-Dinitrophenol, 2-Nitrophenol, 4,6-Dinitro-o-cresol, 4-Chloro-3-methyl phenol, Benzo(g,h,i)perylene, Benzoic Acid, bis(2-Chloroethoxy)methane, bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Di-n-octyl phthalate, Hexachlorocyclopentadiene, Indeno(1,2,3-cd)pyrene are outside control limits for sample OP49307-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) FA9421-2 has surrogates outside control limits. Probable cause is due to matrix interference.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP49356

All method blanks for this batch meet method specific criteria.

Sample(s) JB51537-3MS, JB51537-3MSD were used as the QC samples indicated.

The following samples were extracted outside of holding time for method SW846 8270D: FA9421-2.

Matrix Spike Recovery(s) for 4,6-Dinitro-o-cresol, Hexachlorocyclopentadiene, Pyridine are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for 4,6-Dinitro-o-cresol, Hexachlorocyclopentadiene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Sample(s) FA9421-2 has surrogates outside control limits. Probable cause is due to matrix interference.

FA9421-2: Re-extracted and reanalyzed beyond holdtime for confirmation. Confirmation run was ND.

Volatiles by GC By Method SW846 8015C

Matrix: SO **Batch ID:** GCD5091

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9376-2MS, FA9376-2MSD were used as the QC samples indicated.

Sample(s) FA9376-2MS, FA9376-2MSD, FA9421-1 have surrogates outside control limits. Probable cause is due to matrix interference.

FA9376-2MS for 4-Bromofluorobenzene: Result reported from PID.

FA9376-2MS for 4-Bromofluorobenzene: Outside control limits due to matrix interference.

FA9376-2MS for aaa-Trifluorotoluene: Result reported from PID.

FA9376-2MS for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

FA9376-2MSD for 4-Bromofluorobenzene: Result reported from PID.

FA9376-2MSD for 4-Bromofluorobenzene: Outside control limits due to matrix interference.

FA9376-2MSD for aaa-Trifluorotoluene: Result reported from PID.

FA9376-2MSD for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

FA9421-1 for 4-Bromofluorobenzene: Result reported from PID.

FA9421-1 for 4-Bromofluorobenzene: Outside control limits due to matrix interference.

FA9421-1 for aaa-Trifluorotoluene: Result reported from PID.

FA9421-1 for aaa-Trifluorotoluene: Outside control limits due to matrix interference.

Extractables by GC By Method SW846 8015C

Matrix: SO **Batch ID:** OP49288

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA9516-8MS, FA9516-8MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for TPH (>C22-C36), TPH (C10-C22) are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN58700

Sample(s) FA9421-1DUP, FA9421-2DUP were used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Date: November 12, 2013

_____

Lovelie Metzgar, QA Officer (signature on file)

Summary of Hits

Job Number: FA9421
Account: Bhate Environmental
Project: Holloman AFB; SS61 VCM
Collected: 10/23/13

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA9421-1	**SS61-SB74C-28**					
sec-Butylbenzene		20.5	4.6	1.1	ug/kg	SW846 8260B
tert-Butylbenzene		38.3	4.6	1.1	ug/kg	SW846 8260B
Carbon disulfide		5.8	4.6	1.8	ug/kg	SW846 8260B
Isopropylbenzene		27.4	4.6	1.2	ug/kg	SW846 8260B
Toluene		1.8 J	4.6	0.92	ug/kg	SW846 8260B
TPH-GRO (C6-C10)		216	24	12	mg/kg	SW846 8015C
FA9421-2	**SS61-SB76C-30**					
tert-Butylbenzene		1.2 J	4.8	1.1	ug/kg	SW846 8260B
Carbon disulfide		7.8	4.8	1.9	ug/kg	SW846 8260B
FA9421-3	**TRIP BLANK**					

No hits reported in this sample.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SS61-SB74C-28		
Lab Sample ID:	FA9421-1	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	77.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0091134.D	1	10/28/13	EP	n/a	n/a	VG3295
Run #2							

	Initial Weight
Run #1	7.04 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	46	18	ug/kg	
107-02-8	Acrolein	ND	23	8.0	ug/kg	
107-13-1	Acrylonitrile	ND	23	9.2	ug/kg	
71-43-2	Benzene	ND	4.6	0.92	ug/kg	
108-86-1	Bromobenzene	ND	4.6	1.0	ug/kg	
74-97-5	Bromochloromethane	ND	4.6	1.3	ug/kg	
75-27-4	Bromodichloromethane	ND	4.6	1.3	ug/kg	
75-25-2	Bromoform	ND	4.6	0.92	ug/kg	
104-51-8	n-Butylbenzene	ND	4.6	1.2	ug/kg	
135-98-8	sec-Butylbenzene	20.5	4.6	1.1	ug/kg	
98-06-6	tert-Butylbenzene	38.3	4.6	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	4.6	0.92	ug/kg	
75-00-3	Chloroethane	ND	4.6	1.8	ug/kg	
67-66-3	Chloroform	ND	4.6	0.92	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.6	0.92	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.6	1.1	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	23	9.2	ug/kg	
75-15-0	Carbon disulfide	5.8	4.6	1.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.6	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.6	0.92	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.6	1.1	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.6	0.92	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.6	2.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.6	0.92	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.6	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.6	0.92	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.6	0.92	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.6	0.92	ug/kg	
124-48-1	Dibromochloromethane	ND	4.6	0.92	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.6	0.92	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.6	0.92	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.6	0.92	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74C-28		
Lab Sample ID:	FA9421-1	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	77.0
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	4.6	0.92	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.6	1.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.6	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.6	0.92	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.6	0.92	ug/kg	
100-41-4	Ethylbenzene	ND	4.6	1.0	ug/kg	
591-78-6	2-Hexanone	ND	23	4.6	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.6	1.9	ug/kg	
110-54-3	Hexane	ND	4.6	2.1	ug/kg	
98-82-8	Isopropylbenzene	27.4	4.6	1.2	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.6	1.2	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	23	4.6	ug/kg	
74-83-9	Methyl bromide	ND	4.6	1.8	ug/kg	
74-87-3	Methyl chloride	ND	4.6	1.9	ug/kg	
74-95-3	Methylene bromide	ND	4.6	0.96	ug/kg	
75-09-2	Methylene chloride	ND	9.2	4.2	ug/kg	
78-93-3	Methyl ethyl ketone	ND	23	4.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.6	0.92	ug/kg	
91-20-3	Naphthalene	ND	4.6	1.8	ug/kg	
103-65-1	n-Propylbenzene	ND	4.6	0.95	ug/kg	
100-42-5	Styrene	ND	4.6	0.92	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.6	0.99	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.6	0.92	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.6	0.92	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.6	0.92	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.6	0.97	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.6	1.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.6	1.1	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.6	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.6	0.97	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.6	1.1	ug/kg	
108-88-3	Toluene	1.8	4.6	0.92	ug/kg	J
79-01-6	Trichloroethylene	ND	4.6	0.92	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.6	1.8	ug/kg	
75-01-4	Vinyl chloride	ND	4.6	0.92	ug/kg	
108-05-4	Vinyl Acetate	ND	23	3.8	ug/kg	
	m,p-Xylene	ND	9.2	1.9	ug/kg	
95-47-6	o-Xylene	ND	4.6	0.92	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74C-28		
Lab Sample ID:	FA9421-1	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	77.0
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		75-124%
2037-26-5	Toluene-D8	98%		75-126%
460-00-4	4-Bromofluorobenzene	99%		71-133%
17060-07-0	1,2-Dichloroethane-D4	104%		72-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74C-28		
Lab Sample ID:	FA9421-1	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	77.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T010427.D	1	11/07/13	FS	11/05/13	OP49307	ST499
Run #2							

	Initial Weight	Final Volume
Run #1	29.7 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1100	220	ug/kg	
95-57-8	2-Chlorophenol	ND	220	26	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	220	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	220	25	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	220	32	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	220	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	440	87	ug/kg	
95-48-7	2-Methylphenol	ND	220	27	ug/kg	
	3&4-Methylphenol	ND	220	45	ug/kg	
88-75-5	2-Nitrophenol	ND	220	33	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	170	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	170	ug/kg	
108-95-2	Phenol	ND	220	36	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	220	26	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	220	28	ug/kg	
83-32-9	Acenaphthene	ND	220	26	ug/kg	
208-96-8	Acenaphthylene	ND	220	25	ug/kg	
62-53-3	Aniline	ND	220	70	ug/kg	
120-12-7	Anthracene	ND	220	22	ug/kg	
92-87-5	Benzidine	ND	2200	510	ug/kg	
56-55-3	Benzo(a)anthracene	ND	220	22	ug/kg	
50-32-8	Benzo(a)pyrene	ND	220	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	220	22	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	220	22	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	220	26	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	220	28	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	220	44	ug/kg	
100-51-6	Benzyl Alcohol	ND	220	44	ug/kg	
91-58-7	2-Chloronaphthalene	ND	220	28	ug/kg	
106-47-8	4-Chloroaniline	ND	220	33	ug/kg	
86-74-8	Carbazole	ND	220	24	ug/kg	
218-01-9	Chrysene	ND	220	22	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74C-28		
Lab Sample ID:	FA9421-1	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	77.0
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	220	31	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	220	30	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	220	25	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	220	23	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	220	22	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	220	24	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	220	29	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	220	23	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	220	23	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	220	26	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	220	37	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	220	22	ug/kg	
132-64-9	Dibenzofuran	ND	220	22	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	440	44	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	220	44	ug/kg	
84-66-2	Diethyl phthalate	ND	440	44	ug/kg	
131-11-3	Dimethyl phthalate	ND	220	44	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	440	44	ug/kg	
206-44-0	Fluoranthene	ND	220	22	ug/kg	
86-73-7	Fluorene	ND	220	24	ug/kg	
118-74-1	Hexachlorobenzene	ND	220	22	ug/kg	
87-68-3	Hexachlorobutadiene	ND	220	24	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	220	30	ug/kg	
67-72-1	Hexachloroethane	ND	220	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	220	22	ug/kg	
78-59-1	Isophorone	ND	220	24	ug/kg	
90-12-0	1-Methylnaphthalene	ND	220	30	ug/kg	
91-57-6	2-Methylnaphthalene	ND	220	25	ug/kg	
88-74-4	2-Nitroaniline	ND	220	32	ug/kg	
99-09-2	3-Nitroaniline	ND	220	31	ug/kg	
100-01-6	4-Nitroaniline	ND	220	47	ug/kg	
91-20-3	Naphthalene	ND	220	22	ug/kg	
98-95-3	Nitrobenzene	ND	220	32	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	440	31	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	220	24	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	220	44	ug/kg	
85-01-8	Phenanthrene	ND	220	22	ug/kg	
129-00-0	Pyrene	ND	220	22	ug/kg	
110-86-1	Pyridine	ND	440	50	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	220	23	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74C-28		
Lab Sample ID:	FA9421-1	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	77.0
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		40-102%
4165-62-2	Phenol-d5	70%		41-100%
118-79-6	2,4,6-Tribromophenol	69%		42-108%
4165-60-0	Nitrobenzene-d5	52%		40-105%
321-60-8	2-Fluorobiphenyl	57%		43-107%
1718-51-0	Terphenyl-d14	92%		45-119%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74C-28		
Lab Sample ID:	FA9421-1	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8015C	**Percent Solids:**	77.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124734.D	1	11/01/13	CP	n/a	n/a	GCD5091
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.21 g	5.0 ml	25.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	216	24	12	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101% [a]		56-149%
460-00-4	4-Bromofluorobenzene	161% [b]		56-149%
98-08-8	aaa-Trifluorotoluene	120% [a]		66-132%
98-08-8	aaa-Trifluorotoluene	169% [b]		66-132%

(a) Result reported from PID.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB74C-28		
Lab Sample ID:	FA9421-1	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	77.0
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38963.D	1	11/06/13	SJL	11/04/13	OP49288	GYY1433
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	11	4.3	mg/kg	
	TPH (> C22-C36)	ND	11	4.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		56-122%

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76C-30		
Lab Sample ID:	FA9421-2	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	72.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0091136.D	1	10/28/13	EP	n/a	n/a	VG3295
Run #2							

	Initial Weight
Run #1	7.19 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	48	19	ug/kg	
107-02-8	Acrolein	ND	24	8.3	ug/kg	
107-13-1	Acrylonitrile	ND	24	9.5	ug/kg	
71-43-2	Benzene	ND	4.8	0.96	ug/kg	
108-86-1	Bromobenzene	ND	4.8	1.0	ug/kg	
74-97-5	Bromochloromethane	ND	4.8	1.3	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	1.3	ug/kg	
75-25-2	Bromoform	ND	4.8	0.96	ug/kg	
104-51-8	n-Butylbenzene	ND	4.8	1.2	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.8	1.2	ug/kg	
98-06-6	tert-Butylbenzene	1.2	4.8	1.1	ug/kg	J
108-90-7	Chlorobenzene	ND	4.8	0.96	ug/kg	
75-00-3	Chloroethane	ND	4.8	1.9	ug/kg	
67-66-3	Chloroform	ND	4.8	0.96	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.8	0.96	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.8	1.1	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	24	9.6	ug/kg	
75-15-0	Carbon disulfide	7.8	4.8	1.9	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.8	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	0.96	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.8	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.8	0.96	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.8	2.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.8	0.96	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.8	1.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	0.96	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.8	0.96	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.8	0.96	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	0.96	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.8	0.96	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.8	0.96	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.96	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76C-30		
Lab Sample ID:	FA9421-2	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	72.8
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	4.8	0.96	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.8	1.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.8	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.8	0.96	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	0.96	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	1.1	ug/kg	
591-78-6	2-Hexanone	ND	24	4.8	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.8	1.9	ug/kg	
110-54-3	Hexane	ND	4.8	2.2	ug/kg	
98-82-8	Isopropylbenzene	ND	4.8	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.8	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	24	4.8	ug/kg	
74-83-9	Methyl bromide	ND	4.8	1.9	ug/kg	
74-87-3	Methyl chloride	ND	4.8	2.0	ug/kg	
74-95-3	Methylene bromide	ND	4.8	0.99	ug/kg	
75-09-2	Methylene chloride	ND	9.6	4.4	ug/kg	
78-93-3	Methyl ethyl ketone	ND	24	4.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.8	0.96	ug/kg	
91-20-3	Naphthalene	ND	4.8	1.9	ug/kg	
103-65-1	n-Propylbenzene	ND	4.8	0.98	ug/kg	
100-42-5	Styrene	ND	4.8	0.96	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.8	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	0.96	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	0.96	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.96	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.8	1.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.8	1.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	1.1	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.8	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.8	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.8	1.1	ug/kg	
108-88-3	Toluene	ND	4.8	0.96	ug/kg	
79-01-6	Trichloroethylene	ND	4.8	0.96	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	1.9	ug/kg	
75-01-4	Vinyl chloride	ND	4.8	0.96	ug/kg	
108-05-4	Vinyl Acetate	ND	24	4.0	ug/kg	
	m,p-Xylene	ND	9.6	2.0	ug/kg	
95-47-6	o-Xylene	ND	4.8	0.96	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76C-30		
Lab Sample ID:	FA9421-2	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	72.8
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		75-124%
2037-26-5	Toluene-D8	103%		75-126%
460-00-4	4-Bromofluorobenzene	100%		71-133%
17060-07-0	1,2-Dichloroethane-D4	102%		72-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76C-30		
Lab Sample ID:	FA9421-2	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	72.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	L066684.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351
Run #2	L066607.D	1	11/06/13	NAF	11/05/13	OP49307	SL3347

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.1 g	1.0 ml

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	1100	230	ug/kg	
95-57-8	2-Chlorophenol	ND	230	27	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	230	25	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	230	26	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	230	33	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	230	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	450	91	ug/kg	
95-48-7	2-Methylphenol	ND	230	28	ug/kg	
	3&4-Methylphenol	ND	230	47	ug/kg	
88-75-5	2-Nitrophenol	ND	230	34	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	180	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	180	ug/kg	
108-95-2	Phenol	ND	230	37	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	230	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	230	29	ug/kg	
83-32-9	Acenaphthene	ND	230	27	ug/kg	
208-96-8	Acenaphthylene	ND	230	26	ug/kg	
62-53-3	Aniline	ND	230	73	ug/kg	
120-12-7	Anthracene	ND	230	23	ug/kg	
92-87-5	Benzidine	ND	2300	530	ug/kg	
56-55-3	Benzo(a)anthracene	ND	230	23	ug/kg	
50-32-8	Benzo(a)pyrene	ND	230	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	230	23	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	230	23	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	230	27	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	230	29	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	230	45	ug/kg	
100-51-6	Benzyl Alcohol	ND	230	45	ug/kg	
91-58-7	2-Chloronaphthalene	ND	230	30	ug/kg	
106-47-8	4-Chloroaniline	ND	230	34	ug/kg	
86-74-8	Carbazole	ND	230	25	ug/kg	
218-01-9	Chrysene	ND	230	23	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76C-30		
Lab Sample ID:	FA9421-2	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	72.8
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	230	32	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	230	31	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	230	26	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	230	24	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	230	23	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	230	25	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	230	30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	230	24	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	230	24	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	230	28	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	230	38	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	230	23	ug/kg	
132-64-9	Dibenzofuran	ND	230	23	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	450	45	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	230	45	ug/kg	
84-66-2	Diethyl phthalate	ND	450	45	ug/kg	
131-11-3	Dimethyl phthalate	ND	230	45	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	450	45	ug/kg	
206-44-0	Fluoranthene	ND	230	23	ug/kg	
86-73-7	Fluorene	ND	230	25	ug/kg	
118-74-1	Hexachlorobenzene	ND	230	23	ug/kg	
87-68-3	Hexachlorobutadiene	ND	230	25	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	230	31	ug/kg	
67-72-1	Hexachloroethane	ND	230	26	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	230	23	ug/kg	
78-59-1	Isophorone	ND	230	25	ug/kg	
90-12-0	1-Methylnaphthalene	ND	230	31	ug/kg	
91-57-6	2-Methylnaphthalene	ND	230	26	ug/kg	
88-74-4	2-Nitroaniline	ND	230	34	ug/kg	
99-09-2	3-Nitroaniline	ND	230	32	ug/kg	
100-01-6	4-Nitroaniline	ND	230	49	ug/kg	
91-20-3	Naphthalene	ND	230	23	ug/kg	
98-95-3	Nitrobenzene	ND	230	33	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	450	33	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	230	25	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	230	45	ug/kg	
85-01-8	Phenanthrene	ND	230	23	ug/kg	
129-00-0	Pyrene	ND	230	23	ug/kg	
110-86-1	Pyridine	ND	450	52	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	230	24	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76C-30		
Lab Sample ID:	FA9421-2	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	72.8
Project:	Holloman AFB; SS61 VCM		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%	0%	40-102%
4165-62-2	Phenol-d5	71%	0%	41-100%
118-79-6	2,4,6-Tribromophenol	79%	20%	42-108%
4165-60-0	Nitrobenzene-d5	70%	0%	40-105%
321-60-8	2-Fluorobiphenyl	72%	0%	43-107%
1718-51-0	Terphenyl-d14	83%	82%	45-119%

(a) Re-extracted and reanalyzed beyond holdtime for confirmation. Confirmation run was ND.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76C-30		
Lab Sample ID:	FA9421-2	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8015C	**Percent Solids:**	72.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD124732.D	1	11/01/13	CP	n/a	n/a	GCD5091
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.09 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.7	3.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		56-149%
98-08-8	aaa-Trifluorotoluene	89%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS61-SB76C-30		
Lab Sample ID:	FA9421-2	**Date Sampled:**	10/23/13
Matrix:	SO - Soil	**Date Received:**	10/25/13
Method:	SW846 8015C SW846 3550C	**Percent Solids:**	72.8
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YY38966.D	1	11/06/13	SJL	11/04/13	OP49288	GYY1433
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	11	4.6	mg/kg	
	TPH (> C22-C36)	ND	11	4.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		56-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9421-3	**Date Sampled:**	10/23/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0083045.D	1	10/28/13	EP	n/a	n/a	VH3126
Run #2							

	Initial Weight
Run #1	5.00 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9421-3	**Date Sampled:**	10/23/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride [a]	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	FA9421-3	**Date Sampled:**	10/23/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	10/25/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Holloman AFB; SS61 VCM		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		75-124%
2037-26-5	Toluene-D8	89%		75-126%
460-00-4	4-Bromofluorobenzene	89%		71-133%
17060-07-0	1,2-Dichloroethane-D4	103%		72-135%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

bhate ENVIRONMENT INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

FA9421

Chain of Custody and Analytical Request

Page: 1 of 1
Project No: 9100133
COC Number(1): 10242013-02
LIMS Number:

Facility/Base I.D.: Holloman Air Force Base
Project/Site Name: SS-61 VCM Performance Monitoring (Soil - Semiannual # 3, Oct 2013)
Client Name: USACE - Omaha District
Collected by: Dustin McNeil / Zack Beck

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	V8260STD	V8015GRO	AB8270STD	B8015DRO/ORO							Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
									Sample Analysis Requested (5)											Quality Assurance Samples (6)			
1	SS61-SB74C-28	SS61-SB74	10/23/13	1315	27-28	N	1	SO	5	X	X	X	X										2
2	SS61-SB76S-30	SS61-SB76	10/23/13	1445	29-30	N	1	SO	5	X	X	X	X										2
3	Trip Blank				-	TB	1	SQ	3	X													2
					-																		
					-																		
					-																		
					-																		
					-																		
					-																		

COMMENTS:

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. [signature]	10/24/13	1400	1. FR		
2. [signature]	10-25-13	930	2. [signature]		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:
Method of Shipment: Fed Ex
Analytical Lab: Accutest Labs
Lab Recipient:
Shipped No.:
Airbill Number: 796988672736
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

2.0

FA9421: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA9421 CLIENT: B Hate PROJECT: SS-61

DATE/TIME RECEIVED: 10-25-13 930 {MM/DD/YY 24:00} NIMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 7969 0867 2195

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE PRESENT

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [x] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? 2

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +6.4
- [ ] OBSERVED TEMPS: 1.6
- [ ] CORRECTED TEMPS: 7.8

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE [signature] 10-25-13 REVIEWER SIGNATURE/DATE [signature] 10/25/13

NF 12/10

receipt confirmation 122910.xls

5.1

5

FA9421: Chain of Custody

Page 2 of 2

Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3295-MB	G0091115.D	1	10/28/13	EP	n/a	n/a	VG3295

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-1, FA9421-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3295-MB	G0091115.D	1	10/28/13	EP	n/a	n/a	VG3295

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-1, FA9421-2

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3295-MB	G0091115.D	1	10/28/13	EP	n/a	n/a	VG3295

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-1, FA9421-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	75-124%
2037-26-5	Toluene-D8	98%	75-126%
460-00-4	4-Bromofluorobenzene	106%	71-133%
17060-07-0	1,2-Dichloroethane-D4	107%	72-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile [a]		0	ug/kg	

(a) No TICs detected.

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-MB	H0083024.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/kg	
107-02-8	Acrolein	ND	25	8.7	ug/kg	
107-13-1	Acrylonitrile	ND	25	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.1	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.3	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.2	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.2	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.1	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-MB	H0083024.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-3

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
591-78-6	2-Hexanone	ND	25	5.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/kg	
110-54-3	Hexane	ND	5.0	2.3	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.3	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	5.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.1	ug/kg	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.2	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	4.1	ug/kg	
	m,p-Xylene	ND	10	2.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-MB	H0083024.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	90%	75-124%
2037-26-5	Toluene-D8	87%	75-126%
460-00-4	4-Bromofluorobenzene	89%	71-133%
17060-07-0	1,2-Dichloroethane-D4	93%	72-135%

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3295-BS	G0091114.D	1	10/28/13	EP	n/a	n/a	VG3295

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-1, FA9421-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	270	108	61-152
107-02-8	Acrolein	250	217	87	48-178
107-13-1	Acrylonitrile	250	226	90	66-134
71-43-2	Benzene	50	56.7	113	76-126
108-86-1	Bromobenzene	50	56.7	113	76-122
74-97-5	Bromochloromethane	50	54.0	108	77-120
75-27-4	Bromodichloromethane	50	60.0	120	74-130
75-25-2	Bromoform	50	59.2	118	76-127
104-51-8	n-Butylbenzene	50	53.6	107	71-128
135-98-8	sec-Butylbenzene	50	56.1	112	79-135
98-06-6	tert-Butylbenzene	50	55.5	111	77-133
108-90-7	Chlorobenzene	50	58.8	118	81-129
75-00-3	Chloroethane	50	64.1	128	68-133
67-66-3	Chloroform	50	53.7	107	72-123
95-49-8	o-Chlorotoluene	50	57.1	114	77-129
106-43-4	p-Chlorotoluene	50	58.2	116	80-134
110-75-8	2-Chloroethyl vinyl ether	250	265	106	45-159
75-15-0	Carbon disulfide	50	51.1	102	72-122
56-23-5	Carbon tetrachloride	50	57.1	114	78-133
75-34-3	1,1-Dichloroethane	50	54.2	108	73-125
75-35-4	1,1-Dichloroethylene	50	59.0	118	81-136
563-58-6	1,1-Dichloropropene	50	56.8	114	75-130
96-12-8	1,2-Dibromo-3-chloropropane	50	49.9	100	70-137
106-93-4	1,2-Dibromoethane	50	57.9	116	77-126
107-06-2	1,2-Dichloroethane	50	57.6	115	74-128
78-87-5	1,2-Dichloropropane	50	55.5	111	74-125
142-28-9	1,3-Dichloropropane	50	57.6	115	76-122
594-20-7	2,2-Dichloropropane	50	46.6	93	77-133
124-48-1	Dibromochloromethane	50	59.1	118	76-127
75-71-8	Dichlorodifluoromethane	50	53.2	106	68-168
156-59-2	cis-1,2-Dichloroethylene	50	56.8	114	74-126
10061-01-5	cis-1,3-Dichloropropene	50	54.8	110	80-123
541-73-1	m-Dichlorobenzene	50	58.2	116	81-129
95-50-1	o-Dichlorobenzene	50	58.1	116	80-129
106-46-7	p-Dichlorobenzene	50	55.6	111	76-130
156-60-5	trans-1,2-Dichloroethylene	50	57.0	114	70-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3295-BS	G0091114.D	1	10/28/13	EP	n/a	n/a	VG3295

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-1, FA9421-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	60.6	121	75-131
100-41-4	Ethylbenzene	50	55.3	111	77-123
591-78-6	2-Hexanone	250	275	110	72-133
87-68-3	Hexachlorobutadiene	50	49.0	98	74-136
110-54-3	Hexane	50	52.2	104	72-130
98-82-8	Isopropylbenzene	50	58.6	117	80-136
99-87-6	p-Isopropyltoluene	50	57.5	115	77-131
108-10-1	4-Methyl-2-pentanone	250	267	107	76-132
74-83-9	Methyl bromide	50	66.3	133	65-139
74-87-3	Methyl chloride	50	50.3	101	71-144
74-95-3	Methylene bromide	50	59.2	118	74-124
75-09-2	Methylene chloride	50	54.6	109	74-137
78-93-3	Methyl ethyl ketone	250	287	115	75-137
1634-04-4	Methyl Tert Butyl Ether	50	51.5	103	77-120
91-20-3	Naphthalene	50	50.0	100	79-129
103-65-1	n-Propylbenzene	50	59.1	118	80-135
100-42-5	Styrene	50	57.2	114	78-125
630-20-6	1,1,1,2-Tetrachloroethane	50	54.7	109	78-126
71-55-6	1,1,1-Trichloroethane	50	56.4	113	70-129
79-34-5	1,1,2,2-Tetrachloroethane	50	53.8	108	71-126
79-00-5	1,1,2-Trichloroethane	50	55.1	110	74-124
87-61-6	1,2,3-Trichlorobenzene	50	49.6	99	77-128
96-18-4	1,2,3-Trichloropropane	50	56.5	113	74-127
120-82-1	1,2,4-Trichlorobenzene	50	51.3	103	78-130
95-63-6	1,2,4-Trimethylbenzene	50	54.5	109	74-123
108-67-8	1,3,5-Trimethylbenzene	50	53.0	106	73-122
127-18-4	Tetrachloroethylene	50	56.0	112	79-130
108-88-3	Toluene	50	53.6	107	76-124
79-01-6	Trichloroethylene	50	55.8	112	75-128
75-69-4	Trichlorofluoromethane	50	58.7	117	73-145
75-01-4	Vinyl chloride	50	51.7	103	76-141
108-05-4	Vinyl Acetate	250	248	99	48-164
	m,p-Xylene	100	114	114	80-128
95-47-6	o-Xylene	50	58.5	117	80-132

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG3295-BS	G0091114.D	1	10/28/13	EP	n/a	n/a	VG3295

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-1, FA9421-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	75-124%
2037-26-5	Toluene-D8	102%	75-126%
460-00-4	4-Bromofluorobenzene	105%	71-133%
17060-07-0	1,2-Dichloroethane-D4	101%	72-135%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-BS	H0083025.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	358	143	61-152
107-02-8	Acrolein	250	224	90	48-178
107-13-1	Acrylonitrile	250	296	118	66-134
71-43-2	Benzene	50	57.1	114	76-126
108-86-1	Bromobenzene	50	54.2	108	76-122
74-97-5	Bromochloromethane	50	54.6	109	77-120
75-27-4	Bromodichloromethane	50	59.3	119	74-130
75-25-2	Bromoform	50	58.5	117	76-127
104-51-8	n-Butylbenzene	50	45.5	91	71-128
135-98-8	sec-Butylbenzene	50	53.3	107	79-135
98-06-6	tert-Butylbenzene	50	50.0	100	77-133
108-90-7	Chlorobenzene	50	59.4	119	81-129
75-00-3	Chloroethane	50	38.4	77	68-133
67-66-3	Chloroform	50	54.7	109	72-123
95-49-8	o-Chlorotoluene	50	56.8	114	77-129
106-43-4	p-Chlorotoluene	50	61.2	122	80-134
110-75-8	2-Chloroethyl vinyl ether	250	237	95	45-159
75-15-0	Carbon disulfide	50	49.9	100	72-122
56-23-5	Carbon tetrachloride	50	63.8	128	78-133
75-34-3	1,1-Dichloroethane	50	57.0	114	73-125
75-35-4	1,1-Dichloroethylene	50	57.3	115	81-136
563-58-6	1,1-Dichloropropene	50	52.3	105	75-130
96-12-8	1,2-Dibromo-3-chloropropane	50	61.2	122	70-137
106-93-4	1,2-Dibromoethane	50	59.5	119	77-126
107-06-2	1,2-Dichloroethane	50	59.6	119	74-128
78-87-5	1,2-Dichloropropane	50	57.4	115	74-125
142-28-9	1,3-Dichloropropane	50	59.7	119	76-122
594-20-7	2,2-Dichloropropane	50	58.5	117	77-133
124-48-1	Dibromochloromethane	50	50.9	102	76-127
75-71-8	Dichlorodifluoromethane	50	42.3	85	68-168
156-59-2	cis-1,2-Dichloroethylene	50	58.1	116	74-126
10061-01-5	cis-1,3-Dichloropropene	50	49.3	99	80-123
541-73-1	m-Dichlorobenzene	50	59.5	119	81-129
95-50-1	o-Dichlorobenzene	50	59.9	120	80-129
106-46-7	p-Dichlorobenzene	50	54.2	108	76-130
156-60-5	trans-1,2-Dichloroethylene	50	56.7	113	70-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-BS	H0083025.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	53.8	108	75-131
100-41-4	Ethylbenzene	50	56.6	113	77-123
591-78-6	2-Hexanone	250	290	116	72-133
87-68-3	Hexachlorobutadiene	50	52.5	105	74-136
110-54-3	Hexane	50	56.7	113	72-130
98-82-8	Isopropylbenzene	50	53.7	107	80-136
99-87-6	p-Isopropyltoluene	50	51.5	103	77-131
108-10-1	4-Methyl-2-pentanone	250	329	132	76-132
74-83-9	Methyl bromide	50	42.5	85	65-139
74-87-3	Methyl chloride	50	38.7	77	71-144
74-95-3	Methylene bromide	50	58.6	117	74-124
75-09-2	Methylene chloride	50	59.3	119	74-137
78-93-3	Methyl ethyl ketone	250	334	134	75-137
1634-04-4	Methyl Tert Butyl Ether	50	49.1	98	77-120
91-20-3	Naphthalene	50	49.5	99	79-129
103-65-1	n-Propylbenzene	50	55.8	112	80-135
100-42-5	Styrene	50	49.5	99	78-125
630-20-6	1,1,1,2-Tetrachloroethane	50	58.9	118	78-126
71-55-6	1,1,1-Trichloroethane	50	57.7	115	70-129
79-34-5	1,1,2,2-Tetrachloroethane	50	57.6	115	71-126
79-00-5	1,1,2-Trichloroethane	50	56.7	113	74-124
87-61-6	1,2,3-Trichlorobenzene	50	55.1	110	77-128
96-18-4	1,2,3-Trichloropropane	50	58.4	117	74-127
120-82-1	1,2,4-Trichlorobenzene	50	48.3	97	78-130
95-63-6	1,2,4-Trimethylbenzene	50	54.7	109	74-123
108-67-8	1,3,5-Trimethylbenzene	50	53.5	107	73-122
127-18-4	Tetrachloroethylene	50	52.3	105	79-130
108-88-3	Toluene	50	54.2	108	76-124
79-01-6	Trichloroethylene	50	53.2	106	75-128
75-69-4	Trichlorofluoromethane	50	54.6	109	73-145
75-01-4	Vinyl chloride	50	37.0	74* [a]	76-141
108-05-4	Vinyl Acetate	250	307	123	48-164
	m,p-Xylene	100	104	104	80-128
95-47-6	o-Xylene	50	53.9	108	80-132

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3126-BS	H0083025.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	75-124%
2037-26-5	Toluene-D8	87%	75-126%
460-00-4	4-Bromofluorobenzene	91%	71-133%
17060-07-0	1,2-Dichloroethane-D4	94%	72-135%

(a) Sporadic marginal failure.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9398-201MS	G0091127.D	1	10/28/13	EP	n/a	n/a	VG3295
FA9398-201MSD	G0091128.D	1	10/28/13	EP	n/a	n/a	VG3295
FA9398-201 [a]	G0091126.D	1	10/28/13	EP	n/a	n/a	VG3295

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-1, FA9421-2

CAS No.	Compound	FA9398-201 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		382	338	88	316	83	7	61-152/27
107-02-8	Acrolein	ND		382	160	42*	192	50	18	48-178/37
107-13-1	Acrylonitrile	ND		382	277	73	299	78	8	66-134/26
71-43-2	Benzene	ND		76.4	71.7	94	71.2	93	1	76-126/26
108-86-1	Bromobenzene	ND		76.4	69.7	91	74.3	97	6	76-122/32
74-97-5	Bromochloromethane	ND		76.4	69.9	91	69.0	90	1	77-120/24
75-27-4	Bromodichloromethane	ND		76.4	73.2	96	71.3	93	3	74-130/25
75-25-2	Bromoform	ND		76.4	64.5	84	71.3	93	10	76-127/26
104-51-8	n-Butylbenzene	ND		76.4	63.1	83	61.4	80	3	71-128/35
135-98-8	sec-Butylbenzene	ND		76.4	68.1	89	69.0	90	1	79-135/34
98-06-6	tert-Butylbenzene	ND		76.4	71.3	93	71.1	93	0	77-133/34
108-90-7	Chlorobenzene	ND		76.4	72.6	95	70.4	92	3	81-129/29
75-00-3	Chloroethane	ND		76.4	89.9	118	89.4	117	1	68-133/29
67-66-3	Chloroform	ND		76.4	71.1	93	72.8	95	2	72-123/26
95-49-8	o-Chlorotoluene	ND		76.4	68.3	89	71.9	94	5	77-129/33
106-43-4	p-Chlorotoluene	ND		76.4	68.4	90	70.9	93	4	80-134/33
110-75-8	2-Chloroethyl vinyl ether	ND		382	339	89	336	88	1	45-159/26
75-15-0	Carbon disulfide	ND		76.4	65.3	85	65.8	86	1	72-122/29
56-23-5	Carbon tetrachloride	ND		76.4	76.3	100	76.2	100	0	78-133/29
75-34-3	1,1-Dichloroethane	ND		76.4	70.5	92	71.7	94	2	73-125/27
75-35-4	1,1-Dichloroethylene	ND		76.4	79.4	104	76.4	100	4	81-136/28
563-58-6	1,1-Dichloropropene	ND		76.4	73.0	96	68.5	90	6	75-130/28
96-12-8	1,2-Dibromo-3-chloropropane	ND		76.4	60.2	79	69.2	91	14	70-137/29
106-93-4	1,2-Dibromoethane	ND		76.4	72.5	95	71.6	94	1	77-126/26
107-06-2	1,2-Dichloroethane	ND		76.4	73.0	96	74.2	97	2	74-128/23
78-87-5	1,2-Dichloropropane	ND		76.4	72.3	95	70.6	92	2	74-125/25
142-28-9	1,3-Dichloropropane	ND		76.4	71.6	94	72.1	94	1	76-122/26
594-20-7	2,2-Dichloropropane	ND		76.4	62.8	82	66.1	87	5	77-133/28
124-48-1	Dibromochloromethane	ND		76.4	71.9	94	71.8	94	0	76-127/27
75-71-8	Dichlorodifluoromethane	ND		76.4	69.1	90	66.1	87	4	68-168/29
156-59-2	cis-1,2-Dichloroethylene	ND		76.4	69.7	91	71.1	93	2	74-126/26
10061-01-5	cis-1,3-Dichloropropene	ND		76.4	70.4	92	68.3	89	3	80-123/26
541-73-1	m-Dichlorobenzene	ND		76.4	64.9	85	68.1	89	5	81-129/33
95-50-1	o-Dichlorobenzene	ND		76.4	63.8	84	66.8	87	5	80-129/32
106-46-7	p-Dichlorobenzene	ND		76.4	61.1	80	64.3	84	5	76-130/32
156-60-5	trans-1,2-Dichloroethylene	ND		76.4	71.9	94	74.4	97	3	70-127/27

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9398-201MS	G0091127.D	1	10/28/13	EP	n/a	n/a	VG3295
FA9398-201MSD	G0091128.D	1	10/28/13	EP	n/a	n/a	VG3295
FA9398-201 [a]	G0091126.D	1	10/28/13	EP	n/a	n/a	VG3295

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-1, FA9421-2

CAS No.	Compound	FA9398-201 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		76.4	74.0	97	75.7	99	2	75-131/28
100-41-4	Ethylbenzene	ND		76.4	70.0	92	68.0	89	3	77-123/31
591-78-6	2-Hexanone	ND		382	340	89	353	92	4	72-133/26
87-68-3	Hexachlorobutadiene	ND		76.4	45.4	59*	43.3	57*	5	74-136/38
110-54-3	Hexane	ND		76.4	60.8	80	61.4	80	1	72-130/32
98-82-8	Isopropylbenzene	ND		76.4	71.4	93	68.5	90	4	80-136/32
99-87-6	p-Isopropyltoluene	ND		76.4	69.1	90	70.4	92	2	77-131/34
108-10-1	4-Methyl-2-pentanone	ND		382	356	93	378	99	6	76-132/26
74-83-9	Methyl bromide	ND		76.4	90.6	119	92.6	121	2	65-139/31
74-87-3	Methyl chloride	ND		76.4	63.2	83	64.6	85	2	71-144/27
74-95-3	Methylene bromide	ND		76.4	72.2	94	72.9	95	1	74-124/24
75-09-2	Methylene chloride	ND		76.4	80.6	105	80.6	105	0	74-137/28
78-93-3	Methyl ethyl ketone	ND		382	349	91	355	93	2	75-137/25
1634-04-4	Methyl Tert Butyl Ether	ND		76.4	70.8	93	70.3	92	1	77-120/24
91-20-3	Naphthalene	ND		76.4	42.2	55*	42.9	56*	2	79-129/33
103-65-1	n-Propylbenzene	ND		76.4	70.9	93	74.5	98	5	80-135/33
100-42-5	Styrene	ND		76.4	65.4	86	64.7	85	1	78-125/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		76.4	72.4	95	69.1	90	5	78-126/27
71-55-6	1,1,1-Trichloroethane	ND		76.4	72.5	95	74.4	97	3	70-129/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		76.4	72.5	95	75.7	99	4	71-126/30
79-00-5	1,1,2-Trichloroethane	ND		76.4	72.9	95	72.3	95	1	74-124/28
87-61-6	1,2,3-Trichlorobenzene	ND		76.4	40.8	53*	41.7	55*	2	77-128/35
96-18-4	1,2,3-Trichloropropane	ND		76.4	75.4	99	83.2	109	10	74-127/27
120-82-1	1,2,4-Trichlorobenzene	ND		76.4	45.7	60*	45.3	59*	1	78-130/34
95-63-6	1,2,4-Trimethylbenzene	ND		76.4	69.3	91	72.3	95	4	74-123/34
108-67-8	1,3,5-Trimethylbenzene	ND		76.4	67.1	88	70.5	92	5	73-122/33
127-18-4	Tetrachloroethylene	ND		76.4	64.5	84	64.8	85	0	79-130/31
108-88-3	Toluene	ND		76.4	67.8	89	68.4	90	1	76-124/30
79-01-6	Trichloroethylene	ND		76.4	72.6	95	68.5	90	6	75-128/27
75-69-4	Trichlorofluoromethane	ND		76.4	74.7	98	75.6	99	1	73-145/31
75-01-4	Vinyl chloride	ND		76.4	71.2	93	67.7	89	5	76-141/27
108-05-4	Vinyl Acetate	ND		382	79.9	21*	95.9	25*	18	48-164/37
	m,p-Xylene	ND		153	145	95	140	92	4	80-128/30
95-47-6	o-Xylene	ND		76.4	71.7	94	70.9	93	1	80-132/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9398-201MS	G0091127.D	1	10/28/13	EP	n/a	n/a	VG3295
FA9398-201MSD	G0091128.D	1	10/28/13	EP	n/a	n/a	VG3295
FA9398-201 [a]	G0091126.D	1	10/28/13	EP	n/a	n/a	VG3295

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-1, FA9421-2

CAS No.	Surrogate Recoveries	MS	MSD	FA9398-201	Limits
1868-53-7	Dibromofluoromethane	102%	105%	104%	75-124%
2037-26-5	Toluene-D8	98%	103%	100%	75-126%
460-00-4	4-Bromofluorobenzene	104%	115%	109%	71-133%
17060-07-0	1,2-Dichloroethane-D4	101%	105%	113%	72-135%

(a) Sample was received in a bulk container but was not preserved within 48 hours of sampling.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9376-3MS	H0083039.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3MSD	H0083040.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3	H0083027.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-3

CAS No.	Compound	FA9376-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	43.1		402	468	106	457	103	2	61-152/27
107-02-8	Acrolein	ND		402	134	33*	113	28*	17	48-178/37
107-13-1	Acrylonitrile	ND		402	342	85	322	80	6	66-134/26
71-43-2	Benzene	ND		80.3	94.3	117	72.8	91	26	76-126/26
108-86-1	Bromobenzene	ND		80.3	78.6	98	76.4	95	3	76-122/32
74-97-5	Bromochloromethane	ND		80.3	76.6	95	69.7	87	9	77-120/24
75-27-4	Bromodichloromethane	ND		80.3	170	212*	217	271*	24	74-130/25
75-25-2	Bromoform	ND		80.3	76.0	95	66.7	83	13	76-127/26
104-51-8	n-Butylbenzene	ND		80.3	61.1	76	57.7	72	6	71-128/35
135-98-8	sec-Butylbenzene	ND		80.3	72.1	90	69.7	87	3	79-135/34
98-06-6	tert-Butylbenzene	ND		80.3	12.0	15*	11.1	14*	8	77-133/34
108-90-7	Chlorobenzene	ND		80.3	83.1	103	81.5	102	2	81-129/29
75-00-3	Chloroethane	ND		80.3	68.2	85	61.4	77	10	68-133/29
67-66-3	Chloroform	ND		80.3	78.9	98	71.2	89	10	72-123/26
95-49-8	o-Chlorotoluene	ND		80.3	81.3	101	79.0	99	3	77-129/33
106-43-4	p-Chlorotoluene	ND		80.3	85.7	107	83.5	104	3	80-134/33
110-75-8	2-Chloroethyl vinyl ether	ND		402	321	80	312	78	3	45-159/26
75-15-0	Carbon disulfide	2.7	J	80.3	61.6	73	57.3	68*	7	72-122/29
56-23-5	Carbon tetrachloride	ND		80.3	84.7	105	74.4	93	13	78-133/29
75-34-3	1,1-Dichloroethane	ND		80.3	78.7	98	72.5	90	8	73-125/27
75-35-4	1,1-Dichloroethylene	ND		80.3	80.3	100	81.1	101	1	81-136/28
563-58-6	1,1-Dichloropropene	ND		80.3	67.5	84	63.1	79	7	75-130/28
96-12-8	1,2-Dibromo-3-chloropropane	ND		80.3	126	157*	190	237*	41*	70-137/29
106-93-4	1,2-Dibromoethane	ND		80.3	83.1	103	78.3	98	6	77-126/26
107-06-2	1,2-Dichloroethane	ND		80.3	85.8	107	77.9	97	10	74-128/23
78-87-5	1,2-Dichloropropane	ND		80.3	83.5	104	78.0	97	7	74-125/25
142-28-9	1,3-Dichloropropane	ND		80.3	80.4	100	76.8	96	5	76-122/26
594-20-7	2,2-Dichloropropane	ND		80.3	59.2	74*	43.4	54*	31*	77-133/28
124-48-1	Dibromochloromethane	ND		80.3	69.2	86	61.5	77	12	76-127/27
75-71-8	Dichlorodifluoromethane	ND		80.3	73.1	91	51.8	65*	34*	68-168/29
156-59-2	cis-1,2-Dichloroethylene	ND		80.3	80.1	100	74.8	93	7	74-126/26
10061-01-5	cis-1,3-Dichloropropene	ND		80.3	61.9	77*	39.6	49*	44*	80-123/26
541-73-1	m-Dichlorobenzene	ND		80.3	85.8	107	82.8	103	4	81-129/33
95-50-1	o-Dichlorobenzene	ND		80.3	87.6	109	82.6	103	6	80-129/32
106-46-7	p-Dichlorobenzene	ND		80.3	78.2	97	75.9	95	3	76-130/32
156-60-5	trans-1,2-Dichloroethylene	ND		80.3	76.4	95	71.3	89	7	70-127/27

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9376-3MS	H0083039.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3MSD	H0083040.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3	H0083027.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-3

CAS No.	Compound	FA9376-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		80.3	67.2	84	59.8	75	12	75-131/28
100-41-4	Ethylbenzene	ND		80.3	80.6	100	79.9	100	1	77-123/31
591-78-6	2-Hexanone	ND		402	379	94	490	122	26	72-133/26
87-68-3	Hexachlorobutadiene	ND		80.3	60.5	75	52.6	66*	14	74-136/38
110-54-3	Hexane	ND		80.3	59.6	74	56.8	71*	5	72-130/32
98-82-8	Isopropylbenzene	ND		80.3	77.5	96	76.6	96	1	80-136/32
99-87-6	p-Isopropyltoluene	ND		80.3	69.6	87	65.4	82	6	77-131/34
108-10-1	4-Methyl-2-pentanone	ND		402	396	99	409	102	3	76-132/26
74-83-9	Methyl bromide	ND		80.3	77.6	97	68.3	85	13	65-139/31
74-87-3	Methyl chloride	ND		80.3	71.1	89	65.7	82	8	71-144/27
74-95-3	Methylene bromide	ND		80.3	82.2	102	74.1	92	10	74-124/24
75-09-2	Methylene chloride	ND		80.3	88.8	111	84.1	105	5	74-137/28
78-93-3	Methyl ethyl ketone	ND		402	402	100	380	95	6	75-137/25
1634-04-4	Methyl Tert Butyl Ether	ND		80.3	64.8	81	63.8	80	2	77-120/24
91-20-3	Naphthalene	ND		80.3	70.3	88	67.3	84	4	79-129/33
103-65-1	n-Propylbenzene	ND		80.3	79.0	98	76.9	96	3	80-135/33
100-42-5	Styrene	ND		80.3	72.0	90	72.0	90	0	78-125/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		80.3	81.8	102	74.0	92	10	78-126/27
71-55-6	1,1,1-Trichloroethane	ND		80.3	71.8	89	56.5	71	24	70-129/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		80.3	86.0	107	95.9	120	11	71-126/30
79-00-5	1,1,2-Trichloroethane	ND		80.3	91.4	114	110	137*	18	74-124/28
87-61-6	1,2,3-Trichlorobenzene	ND		80.3	79.8	99	74.2	93	7	77-128/35
96-18-4	1,2,3-Trichloropropane	ND		80.3	98.9	123	116	145*	16	74-127/27
120-82-1	1,2,4-Trichlorobenzene	ND		80.3	73.0	91	67.6	84	8	78-130/34
95-63-6	1,2,4-Trimethylbenzene	ND		80.3	78.8	98	75.2	94	5	74-123/34
108-67-8	1,3,5-Trimethylbenzene	ND		80.3	78.0	97	75.7	94	3	73-122/33
127-18-4	Tetrachloroethylene	ND		80.3	83.1	103	79.3	99	5	79-130/31
108-88-3	Toluene	ND		80.3	77.8	97	76.6	96	2	76-124/30
79-01-6	Trichloroethylene	ND		80.3	79.3	99	75.2	94	5	75-128/27
75-69-4	Trichlorofluoromethane	ND		80.3	71.5	89	64.4	80	10	73-145/31
75-01-4	Vinyl chloride	ND		80.3	70.6	88	64.2	80	9	76-141/27
108-05-4	Vinyl Acetate	ND		402	308	77	294	73	5	48-164/37
	m,p-Xylene	ND		161	145	90	142	89	2	80-128/30
95-47-6	o-Xylene	ND		80.3	79.7	99	79.6	99	0	80-132/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9376-3MS	H0083039.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3MSD	H0083040.D	1	10/28/13	EP	n/a	n/a	VH3126
FA9376-3	H0083027.D	1	10/28/13	EP	n/a	n/a	VH3126

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA9421-3

CAS No.	Surrogate Recoveries	MS	MSD	FA9376-3	Limits
1868-53-7	Dibromofluoromethane	92%	81%	90%	75-124%
2037-26-5	Toluene-D8	90%	91%	85%	75-126%
460-00-4	4-Bromofluorobenzene	94%	88%	91%	71-133%
17060-07-0	1,2-Dichloroethane-D4	87%	102%	95%	72-135%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49307-MB	L066593.D	1	11/06/13	NAF	11/05/13	OP49307	SL3347

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-1, FA9421-2

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	830	170	ug/kg	
95-57-8	2-Chlorophenol	ND	170	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	18	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	19	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	24	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	21	ug/kg	
	3&4-Methylphenol	ND	170	35	ug/kg	
88-75-5	2-Nitrophenol	ND	170	25	ug/kg	
100-02-7	4-Nitrophenol	ND	830	130	ug/kg	
87-86-5	Pentachlorophenol	ND	830	130	ug/kg	
108-95-2	Phenol	ND	170	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	20	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	21	ug/kg	
83-32-9	Acenaphthene	ND	170	20	ug/kg	
208-96-8	Acenaphthylene	ND	170	19	ug/kg	
62-53-3	Aniline	ND	170	53	ug/kg	
120-12-7	Anthracene	ND	170	17	ug/kg	
92-87-5	Benzidine	ND	1700	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	21	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	22	ug/kg	
106-47-8	4-Chloroaniline	ND	170	25	ug/kg	
86-74-8	Carbazole	ND	170	18	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	23	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	17	ug/kg	

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49307-MB	L066593.D	1	11/06/13	NAF	11/05/13	OP49307	SL3347

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-1, FA9421-2

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	170	17	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	18	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	17	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	17	ug/kg	
132-64-9	Dibenzofuran	ND	170	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate	44.9	330	33	ug/kg	J
131-11-3	Dimethyl phthalate	ND	170	33	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	33	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	23	ug/kg	
67-72-1	Hexachloroethane	ND	170	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	17	ug/kg	
78-59-1	Isophorone	ND	170	18	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	23	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	25	ug/kg	
99-09-2	3-Nitroaniline	ND	170	23	ug/kg	
100-01-6	4-Nitroaniline	ND	170	36	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
98-95-3	Nitrobenzene	ND	170	24	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	24	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	17	ug/kg	
110-86-1	Pyridine	ND	330	38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	18	ug/kg	

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49307-MB	L066593.D	1	11/06/13	NAF	11/05/13	OP49307	SL3347

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-1, FA9421-2

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	52%	40-102%
4165-62-2	Phenol-d5	56%	41-100%
118-79-6	2,4,6-Tribromophenol	53%	42-108%
4165-60-0	Nitrobenzene-d5	50%	40-105%
321-60-8	2-Fluorobiphenyl	52%	43-107%
1718-51-0	Terphenyl-d14	56%	45-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.54	280	ug/kg	J
	system artifact/aldol-condensation	3.73	8100	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49356-MB	L066682.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-2

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	830	170	ug/kg	
95-57-8	2-Chlorophenol	ND	170	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	18	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	19	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	24	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	21	ug/kg	
	3&4-Methylphenol	ND	170	35	ug/kg	
88-75-5	2-Nitrophenol	ND	170	25	ug/kg	
100-02-7	4-Nitrophenol	ND	830	130	ug/kg	
87-86-5	Pentachlorophenol	ND	830	130	ug/kg	
108-95-2	Phenol	ND	170	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	20	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	21	ug/kg	
83-32-9	Acenaphthene	ND	170	20	ug/kg	
208-96-8	Acenaphthylene	ND	170	19	ug/kg	
62-53-3	Aniline	ND	170	53	ug/kg	
120-12-7	Anthracene	ND	170	17	ug/kg	
92-87-5	Benzidine	ND	1700	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	21	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	22	ug/kg	
106-47-8	4-Chloroaniline	ND	170	25	ug/kg	
86-74-8	Carbazole	ND	170	18	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	23	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	17	ug/kg	

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49356-MB	L066682.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-2

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	170	17	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	18	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	18	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	17	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	170	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	17	ug/kg	
132-64-9	Dibenzofuran	ND	170	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate	ND	330	33	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	33	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	33	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	23	ug/kg	
67-72-1	Hexachloroethane	ND	170	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	17	ug/kg	
78-59-1	Isophorone	ND	170	18	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	23	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	19	ug/kg	
88-74-4	2-Nitroaniline	ND	170	25	ug/kg	
99-09-2	3-Nitroaniline	ND	170	23	ug/kg	
100-01-6	4-Nitroaniline	ND	170	36	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
98-95-3	Nitrobenzene	ND	170	24	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	24	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	17	ug/kg	
110-86-1	Pyridine	ND	330	38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	18	ug/kg	

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49356-MB	L066682.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-2

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	69%	40-102%
4165-62-2	Phenol-d5	73%	41-100%
118-79-6	2,4,6-Tribromophenol	79%	42-108%
4165-60-0	Nitrobenzene-d5	70%	40-105%
321-60-8	2-Fluorobiphenyl	73%	43-107%
1718-51-0	Terphenyl-d14	81%	45-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.62	2300	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49307-BS	L066592.D	1	11/06/13	NAF	11/05/13	OP49307	SL3347

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-1, FA9421-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic Acid	3330	1480	44	36-118
95-57-8	2-Chlorophenol	1670	921	55	48-104
59-50-7	4-Chloro-3-methyl phenol	1670	977	59	52-108
120-83-2	2,4-Dichlorophenol	1670	939	56	51-105
105-67-9	2,4-Dimethylphenol	1670	909	55	43-96
51-28-5	2,4-Dinitrophenol	3330	2700	81	40-119
534-52-1	4,6-Dinitro-o-cresol	3330	2920	88	64-121
95-48-7	2-Methylphenol	1670	977	59	46-107
	3&4-Methylphenol	3330	2080	62	44-111
88-75-5	2-Nitrophenol	1670	919	55	49-104
100-02-7	4-Nitrophenol	3330	2700	81	56-116
87-86-5	Pentachlorophenol	3330	2440	73	61-114
108-95-2	Phenol	1670	1050	63	45-110
95-95-4	2,4,5-Trichlorophenol	1670	1190	71	58-112
88-06-2	2,4,6-Trichlorophenol	1670	1120	67	56-109
83-32-9	Acenaphthene	1670	1160	70	56-109
208-96-8	Acenaphthylene	1670	1180	71	56-106
62-53-3	Aniline	1670	1280	77	42-108
120-12-7	Anthracene	1670	1300	78	61-110
92-87-5	Benzidine	1670	573	34	10-109
56-55-3	Benzo(a)anthracene	1670	1300	78	66-111
50-32-8	Benzo(a)pyrene	1670	1300	78	59-104
205-99-2	Benzo(b)fluoranthene	1670	1330	80	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1330	80	67-113
207-08-9	Benzo(k)fluoranthene	1670	1350	81	67-114
101-55-3	4-Bromophenyl phenyl ether	1670	1050	63	62-110
85-68-7	Butyl benzyl phthalate	1670	1250	75	65-113
100-51-6	Benzyl Alcohol	1670	1270	76	53-108
91-58-7	2-Chloronaphthalene	1670	1050	63	53-106
106-47-8	4-Chloroaniline	1670	1130	68	30-115
86-74-8	Carbazole	1670	1600	96	60-111
218-01-9	Chrysene	1670	1380	83	65-112
111-91-1	bis(2-Chloroethoxy)methane	1670	872	52	48-105
111-44-4	bis(2-Chloroethyl)ether	1670	848	51	46-103
108-60-1	bis(2-Chloroisopropyl)ether	1670	944	57	40-110
7005-72-3	4-Chlorophenyl phenyl ether	1670	1120	67	58-106

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49307-BS	L066592.D	1	11/06/13	NAF	11/05/13	OP49307	SL3347

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-1, FA9421-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	1670	803	48	44-102
122-66-7	1,2-Diphenylhydrazine	1670	1210	73	58-112
541-73-1	1,3-Dichlorobenzene	1670	802	48	42-100
106-46-7	1,4-Dichlorobenzene	1670	858	51	40-106
121-14-2	2,4-Dinitrotoluene	1670	1360	82	59-109
606-20-2	2,6-Dinitrotoluene	1670	1270	76	61-107
91-94-1	3,3'-Dichlorobenzidine	1670	1640	98	36-114
53-70-3	Dibenzo(a,h)anthracene	1670	1360	82	68-115
132-64-9	Dibenzofuran	1670	1490	89	57-108
84-74-2	Di-n-butyl phthalate	1670	1260	76	63-108
117-84-0	Di-n-octyl phthalate	1670	1300	78	64-119
84-66-2	Diethyl phthalate	1670	1300	78	61-109
131-11-3	Dimethyl phthalate	1670	1150	69	59-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1290	77	64-115
206-44-0	Fluoranthene	1670	1350	81	60-108
86-73-7	Fluorene	1670	1240	74	58-109
118-74-1	Hexachlorobenzene	1670	1210	73	59-111
87-68-3	Hexachlorobutadiene	1670	876	53	41-108
77-47-4	Hexachlorocyclopentadiene	1670	897	54	49-110
67-72-1	Hexachloroethane	1670	820	49	40-105
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1270	76	66-116
78-59-1	Isophorone	1670	887	53	42-89
90-12-0	1-Methylnaphthalene	1670	927	56	49-106
91-57-6	2-Methylnaphthalene	1670	1170	70	47-106
88-74-4	2-Nitroaniline	1670	1700	102	56-123
99-09-2	3-Nitroaniline	1670	1470	88	41-111
100-01-6	4-Nitroaniline	1670	1590	95	54-113
91-20-3	Naphthalene	1670	915	55	44-104
98-95-3	Nitrobenzene	1670	858	51	43-108
62-75-9	N-Nitrosodimethylamine	1670	983	59	40-106
621-64-7	N-Nitroso-di-n-propylamine	1670	982	59	48-108
86-30-6	N-Nitrosodiphenylamine	1670	1240	74	62-110
85-01-8	Phenanthrene	1670	1320	79	63-111
129-00-0	Pyrene	1670	1310	79	65-115
110-86-1	Pyridine	1670	956	57	31-102
120-82-1	1,2,4-Trichlorobenzene	1670	798	48	45-100

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49307-BS	L066592.D	1	11/06/13	NAF	11/05/13	OP49307	SL3347

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-1, FA9421-2

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	58%	40-102%
4165-62-2	Phenol-d5	65%	41-100%
118-79-6	2,4,6-Tribromophenol	74%	42-108%
4165-60-0	Nitrobenzene-d5	52%	40-105%
321-60-8	2-Fluorobiphenyl	64%	43-107%
1718-51-0	Terphenyl-d14	80%	45-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49356-BS	L066681.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic Acid	3330	2150	65	36-118
95-57-8	2-Chlorophenol	1670	1080	65	48-104
59-50-7	4-Chloro-3-methyl phenol	1670	1110	67	52-108
120-83-2	2,4-Dichlorophenol	1670	1060	64	51-105
105-67-9	2,4-Dimethylphenol	1670	1050	63	43-96
51-28-5	2,4-Dinitrophenol	3330	2500	75	40-119
534-52-1	4,6-Dinitro-o-cresol	3330	2650	80	64-121
95-48-7	2-Methylphenol	1670	1130	68	46-107
	3&4-Methylphenol	3330	2310	69	44-111
88-75-5	2-Nitrophenol	1670	1050	63	49-104
100-02-7	4-Nitrophenol	3330	2490	75	56-116
87-86-5	Pentachlorophenol	3330	2670	80	61-114
108-95-2	Phenol	1670	1150	69	45-110
95-95-4	2,4,5-Trichlorophenol	1670	1250	75	58-112
88-06-2	2,4,6-Trichlorophenol	1670	1260	76	56-109
83-32-9	Acenaphthene	1670	1210	73	56-109
208-96-8	Acenaphthylene	1670	1230	74	56-106
62-53-3	Aniline	1670	1060	64	42-108
120-12-7	Anthracene	1670	1290	77	61-110
56-55-3	Benzo(a)anthracene	1670	1290	77	66-111
50-32-8	Benzo(a)pyrene	1670	1260	76	59-104
205-99-2	Benzo(b)fluoranthene	1670	1310	79	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1310	79	67-113
207-08-9	Benzo(k)fluoranthene	1670	1320	79	67-114
101-55-3	4-Bromophenyl phenyl ether	1670	1070	64	62-110
85-68-7	Butyl benzyl phthalate	1670	1260	76	65-113
100-51-6	Benzyl Alcohol	1670	1190	71	53-108
91-58-7	2-Chloronaphthalene	1670	1150	69	53-106
106-47-8	4-Chloroaniline	1670	946	57	30-115
86-74-8	Carbazole	1670	1240	74	60-111
218-01-9	Chrysene	1670	1330	80	65-112
111-91-1	bis(2-Chloroethoxy)methane	1670	1050	63	48-105
111-44-4	bis(2-Chloroethyl)ether	1670	1070	64	46-103
108-60-1	bis(2-Chloroisopropyl)ether	1670	1110	67	40-110
7005-72-3	4-Chlorophenyl phenyl ether	1670	1180	71	58-106
95-50-1	1,2-Dichlorobenzene	1670	1040	62	44-102

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49356-BS	L066681.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
122-66-7	1,2-Diphenylhydrazine	1670	1250	75	58-112
541-73-1	1,3-Dichlorobenzene	1670	1040	62	42-100
106-46-7	1,4-Dichlorobenzene	1670	1100	66	40-106
121-14-2	2,4-Dinitrotoluene	1670	1240	74	59-109
606-20-2	2,6-Dinitrotoluene	1670	1200	72	61-107
91-94-1	3,3'-Dichlorobenzidine	1670	1080	65	36-114
53-70-3	Dibenzo(a,h)anthracene	1670	1310	79	68-115
132-64-9	Dibenzofuran	1670	1200	72	57-108
84-74-2	Di-n-butyl phthalate	1670	1250	75	63-108
117-84-0	Di-n-octyl phthalate	1670	1320	79	64-119
84-66-2	Diethyl phthalate	1670	1220	73	61-109
131-11-3	Dimethyl phthalate	1670	1190	71	59-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1270	76	64-115
206-44-0	Fluoranthene	1670	1300	78	60-108
86-73-7	Fluorene	1670	1290	77	58-109
118-74-1	Hexachlorobenzene	1670	1260	76	59-111
87-68-3	Hexachlorobutadiene	1670	1080	65	41-108
77-47-4	Hexachlorocyclopentadiene	1670	1090	65	49-110
67-72-1	Hexachloroethane	1670	1070	64	40-105
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1280	77	66-116
78-59-1	Isophorone	1670	1030	62	42-89
90-12-0	1-Methylnaphthalene	1670	1060	64	49-106
91-57-6	2-Methylnaphthalene	1670	1010	61	47-106
88-74-4	2-Nitroaniline	1670	1230	74	56-123
99-09-2	3-Nitroaniline	1670	1010	61	41-111
100-01-6	4-Nitroaniline	1670	1200	72	54-113
91-20-3	Naphthalene	1670	1050	63	44-104
98-95-3	Nitrobenzene	1670	987	59	43-108
62-75-9	N-Nitrosodimethylamine	1670	1100	66	40-106
621-64-7	N-Nitroso-di-n-propylamine	1670	1150	69	48-108
86-30-6	N-Nitrosodiphenylamine	1670	1290	77	62-110
85-01-8	Phenanthrene	1670	1310	79	63-111
129-00-0	Pyrene	1670	1270	76	65-115
110-86-1	Pyridine	1670	884	53	31-102
120-82-1	1,2,4-Trichlorobenzene	1670	995	60	45-100

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49356-BS	L066681.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-2

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	68%	40-102%
4165-62-2	Phenol-d5	70%	41-100%
118-79-6	2,4,6-Tribromophenol	77%	42-108%
4165-60-0	Nitrobenzene-d5	60%	40-105%
321-60-8	2-Fluorobiphenyl	69%	43-107%
1718-51-0	Terphenyl-d14	78%	45-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49307-MS	T010428.D	1	11/07/13	FS	11/05/13	OP49307	ST499
OP49307-MSD	L066606.D	1	11/06/13	NAF	11/05/13	OP49307	SL3347
FA9421-1	T010427.D	1	11/07/13	FS	11/05/13	OP49307	ST499

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-1, FA9421-2

CAS No.	Compound	FA9421-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		4360	1020	23*	426	10*	82*	36-118/41
95-57-8	2-Chlorophenol	ND		2180	1310	60	1100	51	17	48-104/26
59-50-7	4-Chloro-3-methyl phenol	ND		2180	1470	67	1170	55	23*	52-108/21
120-83-2	2,4-Dichlorophenol	ND		2180	1350	62	1120	52	19	51-105/27
105-67-9	2,4-Dimethylphenol	ND		2180	1330	61	1110	52	18	43-96/23
51-28-5	2,4-Dinitrophenol	ND		4360	1350	31*	ND	0*	200*	40-119/32
534-52-1	4,6-Dinitro-o-cresol	ND		4360	2340	54*	281	7*	157*	64-121/29
95-48-7	2-Methylphenol	ND		2180	1460	67	1260	59	15	46-107/24
	3&4-Methylphenol	ND		4360	3020	69	2680	63	12	44-111/24
88-75-5	2-Nitrophenol	ND		2180	1250	57	839	39*	39*	49-104/27
100-02-7	4-Nitrophenol	ND		4360	3070	70	2860	67	7	56-116/23
87-86-5	Pentachlorophenol	ND		4360	3060	70	2710	63	12	61-114/23
108-95-2	Phenol	ND		2180	1510	69	1350	63	11	45-110/24
95-95-4	2,4,5-Trichlorophenol	ND		2180	1620	74	1420	66	13	58-112/22
88-06-2	2,4,6-Trichlorophenol	ND		2180	1550	71	1390	65	11	56-109/25
83-32-9	Acenaphthene	ND		2180	1570	72	1360	63	14	56-109/23
208-96-8	Acenaphthylene	ND		2180	1610	74	1420	66	13	56-106/23
62-53-3	Aniline	ND		2180	1880	86	1650	77	13	42-108/28
120-12-7	Anthracene	ND		2180	1760	81	1540	72	13	61-110/21
92-87-5	Benzidine	ND		2180	1570	72	1620	76	3	10-109/35
56-55-3	Benzo(a)anthracene	ND		2180	1830	84	1490	70	20	66-111/23
50-32-8	Benzo(a)pyrene	ND		2180	1800	83	1490	70	19	59-104/23
205-99-2	Benzo(b)fluoranthene	ND		2180	1850	85	1520	71	20	67-113/24
191-24-2	Benzo(g,h,i)perylene	ND		2180	2080	95	1650	77	23*	67-113/21
207-08-9	Benzo(k)fluoranthene	ND		2180	1830	84	1510	70	19	67-114/22
101-55-3	4-Bromophenyl phenyl ether	ND		2180	1420	65	1240	58*	14	62-110/21
85-68-7	Butyl benzyl phthalate	ND		2180	1980	91	1390	65	35*	65-113/20
100-51-6	Benzyl Alcohol	ND		2180	2020	93	1670	78	19	53-108/24
91-58-7	2-Chloronaphthalene	ND		2180	1410	65	1250	58	12	53-106/23
106-47-8	4-Chloroaniline	ND		2180	1760	81	1410	66	22	30-115/30
86-74-8	Carbazole	ND		2180	2180	100	1880	88	15	60-111/19
218-01-9	Chrysene	ND		2180	1880	86	1600	75	16	65-112/25
111-91-1	bis(2-Chloroethoxy)methane	ND		2180	1340	61	1020	48	27*	48-105/24
111-44-4	bis(2-Chloroethyl)ether	ND		2180	1290	59	1020	48	23	46-103/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		2180	1160	53	1060	49	9	40-110/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		2180	1540	71	1360	63	12	58-106/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49307-MS	T010428.D	1	11/07/13	FS	11/05/13	OP49307	ST499
OP49307-MSD	L066606.D	1	11/06/13	NAF	11/05/13	OP49307	SL3347
FA9421-1	T010427.D	1	11/07/13	FS	11/05/13	OP49307	ST499

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-1, FA9421-2

CAS No.	Compound	FA9421-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		2180	850	39*	734	34*	15	44-102/28
122-66-7	1,2-Diphenylhydrazine	ND		2180	1620	74	1420	66	13	58-112/22
541-73-1	1,3-Dichlorobenzene	ND		2180	756	35*	664	31*	13	42-100/30
106-46-7	1,4-Dichlorobenzene	ND		2180	834	38*	753	35*	10	40-106/29
121-14-2	2,4-Dinitrotoluene	ND		2180	1650	76	1480	69	11	59-109/20
606-20-2	2,6-Dinitrotoluene	ND		2180	1680	77	1460	68	14	61-107/22
91-94-1	3,3'-Dichlorobenzidine	ND		2180	2380	109	2020	94	16	36-114/28
53-70-3	Dibenzo(a,h)anthracene	ND		2180	2000	92	1630	76	20	68-115/23
132-64-9	Dibenzofuran	ND		2180	1970	90	1850	86	6	57-108/22
84-74-2	Di-n-butyl phthalate	ND		2180	1710	78	1460	68	16	63-108/19
117-84-0	Di-n-octyl phthalate	ND		2180	2090	96	1430	67	38*	64-119/21
84-66-2	Diethyl phthalate	ND		2180	1620	74	1480	69	9	61-109/20
131-11-3	Dimethyl phthalate	ND		2180	1610	74	1390	65	15	59-108/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		2180	2080	95	1380	64	40*	64-115/23
206-44-0	Fluoranthene	ND		2180	1700	78	1500	70	13	60-108/25
86-73-7	Fluorene	ND		2180	1720	79	1480	69	15	58-109/21
118-74-1	Hexachlorobenzene	ND		2180	1650	76	1420	66	15	59-111/21
87-68-3	Hexachlorobutadiene	ND		2180	940	43	854	40*	10	41-108/27
77-47-4	Hexachlorocyclopentadiene	ND		2180	469	22*	69.3	3*	149*	49-110/31
67-72-1	Hexachloroethane	ND		2180	730	34*	563	26*	26	40-105/32
193-39-5	Indeno(1,2,3-cd)pyrene	ND		2180	2040	94	1590	74	25*	66-116/22
78-59-1	Isophorone	ND		2180	1280	59	1050	49	20	42-89/22
90-12-0	1-Methylnaphthalene	ND		2180	1310	60	1070	50	20	49-106/26
91-57-6	2-Methylnaphthalene	ND		2180	1570	72	1420	66	10	47-106/27
88-74-4	2-Nitroaniline	ND		2180	2160	99	2040	95	6	56-123/24
99-09-2	3-Nitroaniline	ND		2180	2130	98	2040	95	4	41-111/25
100-01-6	4-Nitroaniline	ND		2180	2190	101	1900	89	14	54-113/22
91-20-3	Naphthalene	ND		2180	1170	54	985	46	17	44-104/27
98-95-3	Nitrobenzene	ND		2180	1120	51	974	45	14	43-108/25
62-75-9	N-Nitrosodimethylamine	ND		2180	1260	58	1210	56	4	40-106/27
621-64-7	N-Nitroso-di-n-propylamine	ND		2180	1420	65	1240	58	14	48-108/27
86-30-6	N-Nitrosodiphenylamine	ND		2180	1740	80	1460	68	18	62-110/21
85-01-8	Phenanthrene	ND		2180	1770	81	1520	71	15	63-111/22
129-00-0	Pyrene	ND		2180	1940	89	1530	71	24	65-115/25
110-86-1	Pyridine	ND		2180	1370	63	1120	52	20	31-102/38
120-82-1	1,2,4-Trichlorobenzene	ND		2180	971	45	841	39*	14	45-100/26

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49307-MS	T010428.D	1	11/07/13	FS	11/05/13	OP49307	ST499
OP49307-MSD	L066606.D	1	11/06/13	NAF	11/05/13	OP49307	SL3347
FA9421-1	T010427.D	1	11/07/13	FS	11/05/13	OP49307	ST499

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-1, FA9421-2

CAS No.	Surrogate Recoveries	MS	MSD	FA9421-1	Limits
367-12-4	2-Fluorophenol	70%	60%	61%	40-102%
4165-62-2	Phenol-d5	76%	66%	70%	41-100%
118-79-6	2,4,6-Tribromophenol	75%	68%	69%	42-108%
4165-60-0	Nitrobenzene-d5	59%	52%	52%	40-105%
321-60-8	2-Fluorobiphenyl	68%	63%	57%	43-107%
1718-51-0	Terphenyl-d14	96%	72%	92%	45-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49356-MS	L066691.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351
OP49356-MSD	L066692.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351
JB51537-3	L066690.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-2

CAS No.	Compound	JB51537-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		4070	3610	89	3560	90	1	36-118/41
95-57-8	2-Chlorophenol	ND		2040	1460	72	1360	69	7	48-104/26
59-50-7	4-Chloro-3-methyl phenol	ND		2040	1520	75	1460	74	4	52-108/21
120-83-2	2,4-Dichlorophenol	ND		2040	1420	70	1370	69	4	51-105/27
105-67-9	2,4-Dimethylphenol	ND		2040	1450	71	1380	70	5	43-96/23
51-28-5	2,4-Dinitrophenol	ND		4070	2290	56	2170	55	5	40-119/32
534-52-1	4,6-Dinitro-o-cresol	ND		4070	2420	59*	2390	60*	1	64-121/29
95-48-7	2-Methylphenol	ND		2040	1540	76	1410	71	9	46-107/24
	3&4-Methylphenol	ND		4070	3170	78	2950	75	7	44-111/24
88-75-5	2-Nitrophenol	ND		2040	1380	68	1370	69	1	49-104/27
100-02-7	4-Nitrophenol	ND		4070	3560	87	3600	91	1	56-116/23
87-86-5	Pentachlorophenol	ND		4070	3720	91	3590	91	4	61-114/23
108-95-2	Phenol	ND		2040	1570	77	1460	74	7	45-110/24
95-95-4	2,4,5-Trichlorophenol	ND		2040	1780	87	1650	83	8	58-112/22
88-06-2	2,4,6-Trichlorophenol	ND		2040	1750	86	1650	83	6	56-109/25
83-32-9	Acenaphthene	ND		2040	1670	82	1560	79	7	56-109/23
208-96-8	Acenaphthylene	23.7	J	2040	1730	84	1600	80	8	56-106/23
62-53-3	Aniline	ND		2040	1310	64	1300	66	1	42-108/28
120-12-7	Anthracene	24.8	J	2040	1750	85	1680	84	4	61-110/21
56-55-3	Benzo(a)anthracene	59.8	J	2040	1820	86	1760	86	3	66-111/23
50-32-8	Benzo(a)pyrene	45.7	J	2040	1700	81	1670	82	2	59-104/23
205-99-2	Benzo(b)fluoranthene	52.4	J	2040	1760	84	1810	89	3	67-113/24
191-24-2	Benzo(g,h,i)perylene	36.1	J	2040	1720	83	1650	82	4	67-113/21
207-08-9	Benzo(k)fluoranthene	41.6	J	2040	1830	88	1660	82	10	67-114/22
101-55-3	4-Bromophenyl phenyl ether	ND		2040	1450	71	1350	68	7	62-110/21
85-68-7	Butyl benzyl phthalate	ND		2040	1790	88	1710	87	5	65-113/20
100-51-6	Benzyl Alcohol	ND		2040	1600	79	1570	79	2	53-108/24
91-58-7	2-Chloronaphthalene	ND		2040	1590	78	1480	75	7	53-106/23
106-47-8	4-Chloroaniline	ND		2040	1210	59	1190	60	2	30-115/30
86-74-8	Carbazole	ND		2040	1680	82	1590	80	6	60-111/19
218-01-9	Chrysene	70.4	J	2040	1910	90	1830	89	4	65-112/25
111-91-1	bis(2-Chloroethoxy)methane	ND		2040	1440	71	1320	67	9	48-105/24
111-44-4	bis(2-Chloroethyl)ether	ND		2040	1490	73	1380	70	8	46-103/27
108-60-1	bis(2-Chloroisopropyl)ether	ND		2040	1550	76	1390	70	11	40-110/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		2040	1590	78	1500	76	6	58-106/21
95-50-1	1,2-Dichlorobenzene	ND		2040	1410	69	1310	66	7	44-102/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49356-MS	L066691.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351
OP49356-MSD	L066692.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351
JB51537-3	L066690.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-2

CAS No.	Compound	JB51537-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
122-66-7	1,2-Diphenylhydrazine	ND		2040	1700	83	1620	82	5	58-112/22
541-73-1	1,3-Dichlorobenzene	ND		2040	1420	70	1350	68	5	42-100/30
106-46-7	1,4-Dichlorobenzene	ND		2040	1480	73	1390	70	6	40-106/29
121-14-2	2,4-Dinitrotoluene	ND		2040	1620	80	1570	79	3	59-109/20
606-20-2	2,6-Dinitrotoluene	ND		2040	1610	79	1550	78	4	61-107/22
91-94-1	3,3'-Dichlorobenzidine	ND		2040	1350	66	1240	63	8	36-114/28
53-70-3	Dibenzo(a,h)anthracene	ND		2040	1730	85	1650	83	5	68-115/23
132-64-9	Dibenzofuran	ND		2040	1570	77	1560	79	1	57-108/22
84-74-2	Di-n-butyl phthalate	ND		2040	1690	83	1600	81	5	63-108/19
117-84-0	Di-n-octyl phthalate	ND		2040	1790	88	1730	88	3	64-119/21
84-66-2	Diethyl phthalate	ND		2040	1660	81	1580	80	5	61-109/20
131-11-3	Dimethyl phthalate	ND		2040	1620	80	1520	77	6	59-108/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		2040	1790	88	1720	87	4	64-115/23
206-44-0	Fluoranthene	101	J	2040	1830	85	1820	87	1	60-108/25
86-73-7	Fluorene	ND		2040	1750	86	1650	83	6	58-109/21
118-74-1	Hexachlorobenzene	ND		2040	1730	85	1590	80	8	59-111/21
87-68-3	Hexachlorobutadiene	ND		2040	1450	71	1430	72	1	41-108/27
77-47-4	Hexachlorocyclopentadiene	ND		2040	702	34*	547	28*	25	49-110/31
67-72-1	Hexachloroethane	ND		2040	1390	68	1270	64	9	40-105/32
193-39-5	Indeno(1,2,3-cd)pyrene	37.4	J	2040	1690	81	1600	79	5	66-116/22
78-59-1	Isophorone	ND		2040	1420	70	1330	67	7	42-89/22
90-12-0	1-Methylnaphthalene	ND		2040	1400	69	1350	68	4	49-106/26
91-57-6	2-Methylnaphthalene	ND		2040	1310	64	1340	68	2	47-106/27
88-74-4	2-Nitroaniline	ND		2040	1760	86	1730	88	2	56-123/24
99-09-2	3-Nitroaniline	ND		2040	1440	71	1440	73	0	41-111/25
100-01-6	4-Nitroaniline	ND		2040	1610	79	1550	78	4	54-113/22
91-20-3	Naphthalene	ND		2040	1430	70	1330	67	7	44-104/27
98-95-3	Nitrobenzene	ND		2040	1390	68	1310	66	6	43-108/25
62-75-9	N-Nitrosodimethylamine	ND		2040	1520	75	1420	72	7	40-106/27
621-64-7	N-Nitroso-di-n-propylamine	ND		2040	1590	78	1500	76	6	48-108/27
86-30-6	N-Nitrosodiphenylamine	ND		2040	1710	84	1640	83	4	62-110/21
85-01-8	Phenanthrene	54.4	J	2040	1820	87	1760	86	3	63-111/22
129-00-0	Pyrene	115	J	2040	1910	88	1830	87	4	65-115/25
110-86-1	Pyridine	ND		2040	540	27*	712	36	27	31-102/38
120-82-1	1,2,4-Trichlorobenzene	ND		2040	1340	66	1270	64	5	45-100/26

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49356-MS	L066691.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351
OP49356-MSD	L066692.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351
JB51537-3	L066690.D	1	11/11/13	NAF	11/08/13	OP49356	SL3351

The QC reported here applies to the following samples: **Method:** SW846 8270D

FA9421-2

CAS No.	Surrogate Recoveries	MS	MSD	JB51537-3	Limits
367-12-4	2-Fluorophenol	75%	72%		40-102%
4165-62-2	Phenol-d5	79%	75%		41-100%
118-79-6	2,4,6-Tribromophenol	88%	87%		42-108%
4165-60-0	Nitrobenzene-d5	68%	67%	71%	40-105%
321-60-8	2-Fluorobiphenyl	77%	73%	73%	43-107%
1718-51-0	Terphenyl-d14	89%	84%	85%	45-119%

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5091-MB	CD124731.D	1	11/01/13	CP	n/a	n/a	GCD5091

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9421-1, FA9421-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	82%	56-149%
98-08-8	aaa-Trifluorotoluene	85%	66-132%

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD5091-BS	CD124730.D	1	11/01/13	CP	n/a	n/a	GCD5091

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9421-1, FA9421-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	18.2	91	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	97%	56-149%
98-08-8	aaa-Trifluorotoluene	91%	66-132%

8.2.1

8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA9376-2MS	CD124738.D	10	11/01/13	CP	n/a	n/a	GCD5091
FA9376-2MSD	CD124739.D	10	11/01/13	CP	n/a	n/a	GCD5091
FA9376-2	CD124736.D	10	11/01/13	CP	n/a	n/a	GCD5091

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9421-1, FA9421-2

CAS No.	Compound	FA9376-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	1320		856	1980	77	1980	77	0	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA9376-2	Limits
460-00-4	4-Bromofluorobenzene	101% [a]	106% [a]		56-149%
460-00-4	4-Bromofluorobenzene	157%* [b]	157%* [b]	143%	56-149%
98-08-8	aaa-Trifluorotoluene	113% [a]	116% [a]	107% [a]	66-132%
98-08-8	aaa-Trifluorotoluene	155%* [b]	161%* [b]	151%* [b]	66-132%

(a) Result reported from PID.
(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49288-MB	YY38955.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9421-1, FA9421-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	8.3	3.3	mg/kg	
	TPH (> C22-C36)	ND	8.3	3.3	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	102%	56-122%

9.1.1

9

Blank Spike Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49288-BS	YY38954.D	1	11/05/13	SJL	11/04/13	OP49288	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9421-1, FA9421-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C22)	33.3	31.2	94	65-116
	TPH (> C22-C36)	33.3	29.5	89	51-148

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	121%	56-122%

9.2.1

9

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA9421
Account: BHATALB Bhate Environmental
Project: Holloman AFB; SS61 VCM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP49288-MS	YY38978.D	5	11/06/13	SJL	11/04/13	OP49288	GYY1433
OP49288-MSD	YY38979.D	5	11/06/13	SJL	11/04/13	OP49288	GYY1433
FA9516-8	YY38977.D	5	11/06/13	SJL	11/04/13	OP49288	GYY1433

The QC reported here applies to the following samples: **Method:** SW846 8015C

FA9421-1, FA9421-2

CAS No.	Compound	FA9516-8 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	148		35.7	155	20* [a]	193	123* [a]	22	65-116/28
	TPH (> C22-C36)	144		35.7	150	17* [a]	197	145	27	51-148/28

CAS No.	Surrogate Recoveries	MS	MSD	FA9516-8	Limits
84-15-1	o-Terphenyl	93%	74%	109%	56-122%

(a) Outside control limits due to high level in sample relative to spike amount.

9.3.1

9

* = Outside of Control Limits.

APPENDIX D

Data Validation Reports

January 2013
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, Bhate Environmental Associates, Denver, Colorado.

Introduction

This data validation report covers samples taken from Holloman Air Force Base, New Mexico, on January 22-24, 2013. Eleven aqueous samples and associated trip blanks were collected from site SS-61 for VCM performance monitoring. All analyses were performed by Accutest Laboratories, Inc., Orlando, Florida. The specific samples included in this validation were:

Sample ID	Lab Package	Matrix	Collection Date	Analyses
SS61-MW21	FA1176	Water	1/24/13	VOCs (SW8260B), SVOCs (SW8270D), TPH-GRO/DRO/ORO (SW8015C), Manganese (Dissolved/Total 6010C), BOD (SM5210B), COD (SM5220C), H2S (SM4500), Ferrous Iron (SM3500 FED), Ferric Iron (Total Iron-Ferrous),Ammonia (E350.1), Nitrate & Sulfate (E300/SW9056A), TKN (E351.2), TDS (SM2540C)
SS61-MW21-A				
SS61-MW23			1/23/13	
SS61-MW24				
SS61-MW25	FA1125			
SS61-MW26				
SS61-MW27				
SS61-MW28				
SS61-MW29			1/22/13	
SS61-MW30				
SS61-MW31				

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) and in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, January 2010).

Sample Handling and Holding times

The samples were properly preserved and transferred under chain-of-custody to the laboratory for analysis and analyzed within the required holding times with the following exception. Ferrous iron was analyzed outside the recommended 24 hours. Since all samples were analyzed within 48 hour; using professional judgment no qualification was necessary.

Blanks

The trip blank associated with sample SS61-MW24 reported a detection of methylene chloride. This compound was not detected in the sample and required no qualification.

For all samples in lab package FA1125, TDS was detected in the method blank. Due to the fact the concentration of TDS in the samples was far above 5x the blank concentration the data was not adversely affected by blank contamination and required no qualification.

The volatile method blank associated with sample SS61-MW25 yielded detections of hexachlorobutadiene and 1,2,3-trichlorobenzene. These compounds were not detected in the sample and required no qualification.

Laboratory Control Sample (LCS)

The volatile LCS recovery for acetone, associated with all samples, was reported above QC limits. Additionally, 2-hexanone and methyl ethyl ketone yielded LCS recoveries above QC limits associated with samples SS61-MW26, SS61-MW24, SS61-MW23 and SS61-MW21. The

semi-volatile LCS recovery for acrolein associated with sample SS61-MW25 and for aniline and benzidine related to samples SS61-MW21 and SS61-MW21-A was reported above QC limits as well. These compounds were not detected in the samples and required no qualification.

The LCS recovery of BOD, 5 day was slightly above QC limits associated with samples SS61-MW24, SS61-MW23, SS61-MW21 and SS61-MW21-A. The data could be biased high and the positive results were qualified estimated, 'J'.

Surrogates

The semi-volatile surrogate recoveries of phenol-d5 and 2-fluorophenol were above QC limits for sample SS61-MW28. Since no compounds were detected in this sample, no qualification was necessary. The batched MS/MSD analysis associated with SS61-MW25, SS61-MW28, SS61-MW26, SS61-MW24, SS61-MW23, SS61-MW21 and SS61-MW21-A also yielded these surrogates above control limits. The batch sample had no adverse affect on the sample data and therefore no qualification was necessary. Additionally, phenol-d5 was recovered slightly above QC limits for samples SS61-MW23 and SS61-MW21-A. Since only one semi-volatile surrogate was outside control limits no qualification of the data was necessary.

The TPH-GRO surrogate (aaa-trifluorotoluene) was recovered slightly above QC limits in samples SS61-MW27 and SS61-MW28 and the MS/MSD analyses of samples SS61-MW27, SS61-MW25, SS61-MW28, SS61-MW30, SS61-MW31 and SS61-MW21-A. These results were reported from the flame ionization detector (FID) whereas the more sensitive photo ionization detector (PID) reported the surrogate within control limits. Furthermore, this surrogate was reported above QC limits in the MS/MSD analyses associated with SS61-MW29, SS61-MW26 and SS61-MW24 with the sample recovery within control limits. Therefore, using profession knowledge no qualification was deemed necessary.

Matrix spike/matrix spike duplicates (MS/MSD)

The MS/MSD recoveries and or relative percent difference (RPD) for benzene, 2-chloroethyl vinyl ether, carbon disulfide, 1,1-dichloroethylene, cis-1,3-dichloropropene, trans-1,3-dichloropropene and isopropylbenzene were outside control limits associated with samples SS61-MW26, SS61-MW24, SS61-MW23 and SS61-MW21. Also, the MS/MSD and/or RPD for 2-chloroethyl vinyl ether, 1,1-dichloroethylene, cis-1,2-dichloroethylene, trans-1,2-dichroloethylene, hexane, isopropylbenzene and 1,1,1-trichloroethane were outside control limits associated with SS61-MW27, SS61-MW25, SS61-MW28, SS61-MW29 and SS61-MW30. Precision and accuracy were cross reference with the associated LCS recoveries; which were all in control. Therefore using professional judgment no qualification was necessary. Moreover, batch samples were chosen for the volatile MS/MSD analysis related to samples SS61-MW25, SS61-MW31 and SS61-MW21-A which resulted in multiple compounds reported outside control limits as well as the MS for pyridine associated with samples SS61-MW25, SS61-MW28, SS61-MW26, SS61-MW24 and SS61-MW23. Since batch samples are not associated with the sample set; precision and accuracy were determined by the LCS recovery and no qualification was deemed necessary. Finally, the semi-volatile MS and MSD recoveries of benzoic acid, 4-nitrophenol, phenol, aniline, benzo(b)fluoranthene, hexachlorocyclopentadiene, n-nitrosodimethylamine and pyridine were recovered above QC limits associated with samples SS61-MW21 and SS61-MW21-A. Precision and accuracy were cross reference with the associated LCS recoveries; which were all in control (with the exception of aniline). Since aniline was not detected in the associated samples no qualification of any of the sample data was necessary.

The MS and/or RPD of COD, Ammonia and TKN were outside control limits for the samples in lab package FA1125 and for TKN for the samples in lab package FA1176. Precision and

accuracy were cross reference with the associated LCS recoveries; which were all in control. Therefore using professional judgment no qualification was necessary.

Project specific quality assurance/quality control

One field duplicate sample was submitted as part of this sampling group. The RPDs for multiple compounds were outside project defined control limits. These compounds were qualified estimated, "J", in both the parent and duplicate sample (see table below).

Compound quantitation and reporting limits

Where a dilution was required elevated reporting limits were reported.

Overall assessment of data

The container used for the second volatile run for SS61-MW21-A contained significant head space. Benzene and isopropylbenzene were reported from the 2nd run and were qualified estimated, "J".

The RPDs for the duplicate analysis of iron and BOD, 5 day were above QC limits. Due to low duplicate and sample concentrations the RPDs were deemed acceptable.

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*
SS61-MW21	Benzene	432 J
	Sec-Butylbenzene	3.0 J
	Ethylbenzene	216 J
	Isopropylbenzene	353 J
	n-Propylbenzene	26.2 J
	1,2,4-Tirmehtylbenzene	10.1 J
	Toluene	29.8 J
	M,p-xylene	52.3 J
	o-xylene	28 J
	TPH-GRO	0.545 J (mg/l)
	TPH-DRO	0.451 J (mg/l)
	Ferric Iron	0.52 JU (mg/l)
	Ferrous Iron	0.26 J (mg/l)
	TKN	1.0 J (mg/l)
	BOD, 5 day	16.7 J (mg/l)
SS61-MW21-A	Benzene	201 J
	Sec-Butylbenzene	2.0 J
	Ethylbenzene	142 J
	Isopropylbenzene	204 J
	n-Propylbenzene	16.8 J
	1,2,4-Tirmehtylbenzene	6.9 J
	Toluene	19 J
	M,p-xylene	33.4 J
	o-xylene	18.4 J
	TPH-GRO	1.75 J (mg/l)
	TPH-DRO	0.259 J (mg/l)
	Ferric Iron	0.22 J (mg/l)
	Ferrous Iron	0.43 J (mg/l)
	TKN	0.52 J (mg/l)
	BOD, 5 day	17.1 J (mg/l)

*in µg/l unless otherwise stated

April 2013
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, Bhate Environmental Associates, Denver, Colorado.

Introduction

This data validation report covers samples taken from Holloman Air Force Base, New Mexico, on April 9-10, 2013. Eleven aqueous samples and associated trip blanks were collected from site SS-61 for VCM performance monitoring. All analyses were performed by Accutest Laboratories, Inc., Orlando, Florida. The specific samples included in this validation were:

<table>
<tr><th>Sample ID</th><th>Lab Package</th><th>Matrix</th><th>Collection Date</th><th>Analyses</th></tr>
<tr><td>SS61-MW21</td><td rowspan="3">FA3615</td><td rowspan="12">Water</td><td rowspan="9">4/10/13</td><td rowspan="12">VOCs (SW8260B), SVOCs (SW8270D), TPH-GRO/DRO/ORO (SW8015C), Manganese (Dissolved/Total 6010C), BOD (SM5210B), COD (SM5220C), H2S (SM4500), Ferrous Iron (SM3500 FED), Ferric Iron (Total Iron-Ferrous),Ammonia (E350.1), Nitrate & Sulfate (E300/SW9056A), TKN (E351.2), TDS (SM2540C)</td></tr>
<tr><td>SS61-MW23</td></tr>
<tr><td>SS61-MW24</td></tr>
<tr><td>SS61-MW25</td><td>FA3562</td></tr>
<tr><td>SS61-MW26</td><td>FA3615</td></tr>
<tr><td>SS61-MW27</td><td rowspan="7">FA3562</td></tr>
<tr><td>SS61-MW28</td></tr>
<tr><td>SS61-MW29</td><td rowspan="3">4/9/13</td></tr>
<tr><td>SS61-MW30</td></tr>
<tr><td>SS61-MW30-A</td></tr>
<tr><td>SS61-MW31</td><td>4/10/13</td></tr>
</table>

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) and in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, January 2010).

Sample Handling and Holding times

The samples were properly preserved and transferred under chain-of-custody to the laboratory for analysis and analyzed within the required holding times with the following exceptions:

Ferrous iron was analyzed outside the recommended 24 hours. Since all samples were analyzed within 48 hour $\pm$ 2 hours; using professional judgment no qualification was necessary.

Due to laboratory error, all samples were analyzed beyond hold time for TDS and qualified estimated, "J".

Due to instrument error, all samples in package FA3562 along with sample SS61-MW21 analyzed for nitrate were run outside hold time and qualified estimated, (UJ or J).

The volatile confirmatory run of sample SS61-MW28 was performed one day beyond hold time. Only acetone was reported from the second run and was not detected in the sample. Using professional judgment, no qualification was required.

Finally, the trip blank associated with sample SS61-MW28 was not preserved to a pH<2. Methylene chloride was detected in the trip blank but not the sample and no qualification was necessary.

Blanks

The trip blank associated with sample SS61-MW26 reported a detection of methylene chloride. This compound was not detected in the sample and required no qualification.

The trip blank associated with samples SS61-MW23 and SS61-MW24 reported detections of methylene chloride and toluene. Toluene was detected in sample SS61-MW24 but well above 5x the blank concentration. Therefore, the sample was not adversely affected by blank contamination and required no qualification.

The trip blanks associated with lab package FA3562 results in either a low level detection of toluene or methylene chloride or a combination of both. Sample SS61-MW25 yielded a positive detection for toluene but at a concentration >5x the blank concentration. Therefore no qualification was necessary.

For all samples in lab package FA3615, hexachlorobutadiene, naphthalene, 1,2,3-trichlorobenzene and 1,2,4-trichlorobenzene were detected in the method blanks. The result for naphthalene in sample SS61-MW24 was below 5x the blank concentration and qualified as estimated, "J".

The method blanks associated with all samples yielded a low level concentration of TDS. The sample results were well above 5x the blank concentration. Therefore, TDS was not influenced by blank contamination and did not require qualification.

The method blank associated with sample SS61-MW25 yielded a detection of 1,2,3-trichlorobenzene. This compound was not detected in the sample and required no qualification.

Laboratory Control Sample (LCS)

For lab package FA3615, the volatile LCS recovery for o-dichlorobenzene, 1,2,3 trichlorobenzene and 1,2,4 trichlorobenzene were reported above QC limits. The LCS recovery for BOD was reported below QC limits. o-Dichlorobenzene was positively identified in samples SS61-MW21 and SS61-MW24 and was qualified estimated, "J". BOD was qualified estimated (UJ or J) in all associated samples.

The LCS recoveries of acetone, associated with all samples in lab package FA3562, along with 2-hexanone, associated with samples SS61-MW29, SS61-MW27, SS61-MW31, SS61-MW28 and SS61-MW25, were above QC limits. These compounds were not detected in the associated samples and required no qualification.

The LCS recovery of BOD was above control limits associated with samples SS61-MW30, SS61-MW30-A and SS61-MW29 and below QC limits associated with SS61-MW27, SS61-MW31, SS61-MW28 and SS61-MW25. Those positive results in the former three samples were qualified estimated, "J". The results in the latter four samples were qualified estimated detected or estimated non-detected (J or UJ).

Surrogates

The batched MS sample associated with lab package FA3615 yielded the semi-volatile surrogate recovery of phenol-d5 slightly above QC limits. The MS/MSD analyses for lab package FA3562 also recovered phenol-d5 above QC limits. Since only one semi-volatile surrogate was outside control limits no qualification of the data was necessary.

Matrix spike/matrix spike duplicates (MS/MSD)

The MS and/or MSD recoveries for 2-chloroethyl vinyl ether, cis-1,3-dichloropropene, trans-1,3-dichloropropene, naphthalene, 1,2,3-trichlorobenzene, 4-nitrophenol, COD, nitrate and TKN were outside control limits associated with the samples in lab package FA3615. The samples used for

the matrix spike analyses were from another batch/lot. Also, for lab package FA3615, manganese yielded a MS recovery slightly below QC limits.
The MS and/or MSD recoveries of benzene, bromoform, carbon disulfide, dibromochloromethane and cis-1,3-dichloropropene, associated with samples SS61-MW30 and SS61-MW30-A, were outside control limits. The sample used for the matrix spike analyses was from another batch/lot.

The MS/MSD recoveries and/or relative percent difference (RPD), associated with samples SS61-MW29, SS61-MW27, SS61-MW31, SS61-MW28 and SS61-MW25, yielded bromoform, 2-chloroethyl vinyl ether, carbon disulfide, dibromochloromethane, cis-1,3-dichloroproene, trans-1,3-dichloropropene, 2-hexanone, 4-methyl-2-pentanone and styrene outside control limits.

The RDP of chloroethane (associated with SS61-MW25) and the MS recovery of acetone (associated with SS61-MW28) were outside control limits. Each of these matrix spike QC samples was from another batch/lot.

For all samples in lab package FA3562, the MS/MSD and/or RPD for 4-nitrophenol, phenol, benzidine,3,3'-dichlorobenzidine, 3-nitroaniline, 4-nitroaniline and nitrobenzene were outside control limits.

Precision and accuracy were cross referenced with the associated LCS recoveries. The majority was in control but when outside control limits the sample data did not report any detection for the compound in question. Therefore using professional judgment no qualification was necessary.

Project specific quality assurance/quality control

One field duplicate sample was submitted as part of this sampling group. The RPDs for total iron, COD, ferrous iron, total and dissolve manganese were outside project defined control limits. These compounds were qualified estimated, "J", in both the parent and duplicate sample.

Compound quantitation and reporting limits

Where a dilution was required elevated reporting limits were reported.

Overall assessment of data

The post digestate spike was outside control limits for manganese associated with the samples in lab package FA3562. Due to high level in the sample relative to spike amount the data was not adversely affected and required no qualification.

The RPD for the duplicate analysis of BOD was slightly above QC limits associated with all samples. Due to low duplicate and sample concentrations the RPD was deemed acceptable.

For lab package FA3562, the sample dilutions set-up for the MS analysis of BOD did not meet the oxygen depletion criteria of at least 2 mg/L. The BOD in the samples associated with this batch (SS61-MW30, SS61-MW30-A and SS61-MW29) were qualified, (UJ or J).

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*
SS61-MW21	Nitrate TDS o-Dichlorobenzene BOD	2.5 UJ 5620 J 8.5 J 5.6 J
SS61-MW23	TDS BOD	5200 J 2.0 UJ
SS61-MW24	TDS Naphthalene o-Dichlorobenzene BOD	5370 J 2.5 J 2.8 J 5.2 J
SS61-MW25	Nitrate TDS BOD	2.5 UJ 6010 J 16.6 J
SS61-MW26	TDS BOD	4380 J 3.0 J
SS61-MW27	Nitrate TDS BOD	1.3 UJ 5490 J 2.0 UJ
SS61-MW28	Nitrate TDS BOD	5.0 UJ 8700 J 2.2 J
SS61-MW29	Nitrate TDS BOD	5.0 UJ 15000 J 2.0 UJ
SS61-MW30	Nitrate TDS BOD Total Iron Total Manganese Dissolved Manganese COD Ferrous Iron	7.2 J 12400 J 5.7 J 462 J 782 J 907 J 19.8 J 0.11 J
SS61-MW30-A	Nitrate TDS BOD Total Iron Total Manganese Dissolved Manganese COD Ferrous Iron	7.0 J 14900 J 2.0 UJ 840 J 1210 J 1370 J 118 J 0.43 J
SS61-MW31	Nitrate TDS BOD	10 UJ 17300 J 2.0 UJ

*volatiles/metals in µg/l/general chemistry in mg/l

Data Validation Report

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

Introduction

This data validation report covers samples taken from Holloman Air Force Base, New Mexico, on April 8-10, 2013. Soil sampling and analysis were performed on eight soil samples, one field duplicate and associated trip blanks from site SS-61 for VCM Performance Monitoring. All analyses were performed by Accutest Laboratories, Inc., Orlando, Florida. The specific samples included in this validation were:

<table>
<tr><th>Sample ID</th><th>Matrix</th><th>Lab Package</th><th>Collection Date</th><th>Analyses</th></tr>
<tr><td>SS61-SB68B-27</td><td rowspan="9">Soil</td><td rowspan="5">FA3526</td><td rowspan="2">4/8/13</td><td rowspan="9">VOCs (SW8260B), SVOCs (SW8270D), TPH-GRO/DRO/ORO (SW8015C)</td></tr>
<tr><td>SS61-SB69B-30</td></tr>
<tr><td>SS61-SB70B-28</td><td rowspan="4">4/9/13</td></tr>
<tr><td>SS61-SB71B-28</td></tr>
<tr><td>SS61-SB72B-29</td><td rowspan="4">FA3561</td></tr>
<tr><td>SS61-SB72B-29-A</td></tr>
<tr><td>SS61-SB73B-27</td></tr>
<tr><td>SS61-SB74B-28</td><td rowspan="2">4/10/13</td></tr>
<tr><td>SS61-SB76B-30</td></tr>
</table>

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).

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

No compounds were detected in the trip blanks or method blanks of all analyses.

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

Both lab packages yielded the extractable TPH surrogate recovery below control limits in the matrix spike QC analysis. Due to the fact the samples used for these QC analyses were from another batch/lot, as well as the sample surrogate recovery being in control, the data was not adversely affected and required no qualification.

Matrix spike/matrix spike duplicates (MS/MSD)

Both lab packages yielded MS/MSD recoveries and/or relative percent difference (RPD) for various volatile, semi-volatile compounds and TPH extractable compounds outside control limits. The samples used for these matrix spike analyses were from another batch/lot. Precision and accuracy were cross reference with the associated LCS

recoveries; which were in control. Therefore using professional judgment no qualification of the data was necessary.

Project specific quality assurance/quality control

One field duplicate sample was submitted as part of this sampling event. The RPD for benzo(a)anthracene, fluoranthene and pyrene was outside project defined control limits due to possible sample non-homogeneity. These compounds were qualified estimated, "J", in both sample and duplicate.

Compound quantitation and reporting limits

Where a dilution was required of the sample 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*
SS61-SB72B-29	Benzo(a)anthracene Fluoranthene Pyrene	24.4 J 38.3 J 33.7 J
SS61-SB72B-29-A	Benzo(a)anthracene Fluoranthene Pyrene	42.9 J 97.3 J 67.7 J

* in µg/kg

July 2013
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, Bhate Environmental Associates, Denver, Colorado.

Introduction

This data validation report covers samples taken from Holloman Air Force Base, New Mexico, on July 16-18, 2013. Ten aqueous samples, one duplicate and associated trip blanks were collected from site SS-61 for VCM performance monitoring. All analyses were performed by Accutest Laboratories, Inc., Orlando, Florida. The specific samples included in this validation were:

Sample ID	Lab Package	Matrix	Collection Date	Analyses
SS61-MW21	FA6583	Water	7/17/13	VOCs (SW8260B), SVOCs (SW8270D), TPH-GRO/DRO/ORO (SW8015C), Manganese (Dissolved/Total 200.7/6010C), BOD (SM5210B), COD (SM5220C), H2S (SM4500), Ferrous Iron (SM3500 FED), Ferric Iron (Total Iron-Ferrous),Ammonia (E350.1), Nitrate & Sulfate (E300/SW9056A), TKN (E351.2), TDS (SM2540C)
SS61-MW23				
SS61-MW24	FA6510			
SS61-MW25	FA6583		7/18/13	
SS61-MW25-A				
SS61-MW26	FA6510		7/17/13	
SS61-MW27				
SS61-MW28			7/16/13	
SS61-MW29				
SS61-MW30	FA6468			
SS61-MW31	FA6464			

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) and in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, January 2010).

Sample Handling and Holding times

The samples were properly preserved and transferred under chain-of-custody to the laboratory for analysis and analyzed within the required holding times with the following exceptions:

Ferrous iron was analyzed outside the recommended 24 hours. Since all samples were analyzed within 48 hours; using professional judgment no qualification was necessary.

The BOD analysis for sample SS61-MW21 exceeded the 48 hr hold time by 10 minutes. Using professional judgment, no qualification of the data was deemed necessary.

Blanks

The trip blanks associated with samples SS61-MW30 and SS61-MW28 reported low level detections of toluene. This compound was not detected in the samples and required no qualification.

The trip blank associated with sample SS61-MW26 reported a low level detection of isopropylbenzene. Isopropylbenzene was detected in the sample but well above 5x the blank concentration. Therefore, the sample was not adversely affected by blank contamination and required no qualification.

The trip blanks associated with samples SS61-MW21, SS61-MW23 and SS61-MW25 reported low level detections of toluene. All samples yielded detections for toluene but at a concentration >5x the blank concentration. Therefore no qualification was necessary.

The method blanks associated with samples in package FA6583 yielded low level concentrations of TDS. The sample results were well above 5x the blank concentration. Therefore, TDS was not influenced by blank contamination and did not require qualification.

Laboratory Control Sample (LCS)

The volatile LCS recoveries for acetone and tetrachloroethylene were reported above QC limits associated with samples SS61-MW31 and SS61-MW30. These compounds were not detected in the associated samples and required no qualification.

The LCS recovery of acrolein, associated with all samples in lab packages FA6510 and FA6583, was above QC limits. This compound was not detected in the associated samples and required no qualification.

The LCS recovery of BOD was above control limits associated with all samples in lab package FA6583. Those positive results were qualified estimated, "J".

Surrogates

The semi-volatile analysis of sample SS61-MW-31 yielded the surrogate recovery of nitrobenzene-d5 slightly above QC limits. Since only one semi-volatile surrogate was outside control limits no qualification of the data was necessary.

Matrix spike/matrix spike duplicates (MS/MSD)

The MS/MSD recoveries and/or relative percent difference (RPD) for 2-chloroethyl vinyl ether, TPH-DRO and benzidine were outside control limits associated with samples SS61-MW31 and SS61-MW30. The samples used for the matrix spike analyses were from another batch/lot. Also, nitrate, TKN and sulfate yielded MS recoveries outside QC limits. Precision and accuracy were cross reference with the LCS recoveries; which were in control. Therefore, no qualification was necessary.

The MS/MSD recoveries and/or relative percent difference (RPD), associated with samples from packages FA6510 and FA6583, yielded acrolein, benzidine, TPH-DRO, sulfate and 2-chloroethyl vinyl ether outside control limits along with the MS recovery of benzene associated with sample SS61-MW26. Precision and accuracy were cross reference with the LCS recoveries; which were in control (with the exception of acrolein). Since acrolein was not detected in any associated sample using professional judgment no qualification of any sample was necessary.

Project specific quality assurance/quality control

One field duplicate sample was submitted as part of this sampling group. The RPDs for methylene chloride, toluene, phenol, TPH-DRO, ferric iron and ferrous iron were outside project defined control limits. These compounds were qualified estimated, "J", in both the parent and duplicate sample.

Compound quantitation and reporting limits

Where a dilution was required elevated reporting limits were reported.

Overall assessment of data

The post digestate spike was outside control limits for manganese associated with samples SS61-MW31, SS61-MW30, SS61-MW21, SS61-MW23, SS61-MW25 and SS61-MW25-A. Due to high level in the sample relative to spike amount the data was not adversely affected and required no qualification.

The serial dilution percent difference of iron was above QC limits for samples in package FA6510. Since total iron was not a requested parameter but necessary for the calculation of ferrous and ferric iron. Using professional judgment, the sample data was not adversely affected and required no qualification.

The RPD for the laboratory duplicate analysis of BOD was above QC limits associated with samples in package FA6583. Due to low duplicate and sample concentrations the RPD was deemed acceptable.

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*
SS61-MW21	BOD, 5 day	18 J
SS61-MW25	Methylene chloride	181 J
	Toluene	10.3 J
	Phenol	2.5 J
	TPH-DRO	4.49 J
	Ferric iron	0.71 J
	Ferrous iron	0.39 J
	BOD, 5 day	27.2 J
SS61-MW25-A	Methylene chloride	33.8 J
	Toluene	2.5 J
	Phenol	3.9 J
	TPH-DRO	2.01 J
	Ferric iron	0.26 J
	Ferrous iron	0.88 J
	BOD, 5 day	28 J

*volatiles µg/l/TPH & general chemistry in mg/l

October 2013
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, Bhate Environmental Associates, Denver, Colorado.

Introduction

This data validation report covers samples taken from Holloman Air Force Base, New Mexico, on October 21-24, 2013. Ten aqueous samples, one duplicate and associated trip blanks were collected from site SS-61 for VCM performance monitoring. All analyses were performed by Accutest Laboratories, Inc., Orlando, Florida. The specific samples included in this validation were:

Sample ID	Lab Package	Matrix	Collection Date	Analyses
SS61-MW21	FA9420	Water	10/23/13	VOCs (SW8260B), SVOCs (SW8270D), TPH-GRO/DRO/ORO (SW8015C), Manganese (Dissolved/Total 200.7/6010C), BOD (SM5210B), COD (SM5220C), H2S (SM4500), Ferrous Iron (SM3500 FED), Ferric Iron (Total Iron-Ferrous),Ammonia (E350.1), Nitrate & Sulfate (E300/SW9056A), TKN (E351.2), TDS (SM2540C)
SS61-MW23			10/24/13	
SS61-MW24	FA9375		10/23/13	
SS61-MW25				
SS61-MW25-A				
SS61-MW26				
SS61-MW27	FA9328		10/22/13	
SS61-MW28				
SS61-MW29				
SS61-MW30	FA9288		10/21/13	
SS61-MW31				

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) and in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, January 2010).

Sample Handling and Holding times

The samples were properly preserved and transferred under chain-of-custody to the laboratory for analysis and analyzed within the required holding times with the following exceptions:

Ferrous iron was analyzed outside the recommended 24 hours. Since all samples were analyzed within 48 hours; using professional judgment no qualification was necessary.

The hydrogen sulfide analysis for samples in packages FA9375 and FA9420 exceeded the 7 day hold time. This analyte was qualified as estimated (UJ or J).

Blanks

The trip blanks associated with samples SS61-MW31, SS61-MW28, SS61-MW27, SS61-MW26, SS61-MW25, SS61-MW24, SS61-MW23 and SS61-MW21 reported low level detections of toluene. This compound was not detected in the samples, with the exception of SS61-MW26, SS61-MW24 and SS61-MW21, and required no qualification. Samples SS61-MW26, SS61-MW24 and SS61-MW21 reported toluene at concentrations >5x the blank concentration. Therefore, the samples were not adversely affected and required no qualification.

The method blank associated with samples in package FA9375 yielded a low level concentration of TDS. The sample results were well above 5x the blank concentration. Therefore, TDS was not influenced by blank contamination and did not require qualification.

Laboratory Control Sample (LCS)

The volatile LCS recoveries for acetone and dichlorodifluoromethane were reported above QC limits associated with samples SS61-MW29, SS61-MW28, SS61-MW26, SS61-MW25, SS61-MW25-A and SS61-MW24. These compounds were not detected in the associated samples and required no qualification.

The LCS recovery for BOD was slightly below QC limits associated with samples SS61-MW27, SS61-MW28, SS61-MW29, SS61-MW30 and SS61-MW31. Since it was a mere 3/10th of a percentage point below; using professional judgment no qualification was deemed necessary. Also, the LCS BOD recovery was reported below QC limits associated with SS61-MW23 and SS61-MW21. This compound was qualified as estimated (UJ or J).

The LCS recoveries of phenol and 4-bromophenyl phenyl ether, associated with samples SS61-MW30 and SS61-MW31, were below QC limits. These non detected compounds were qualified estimated non-detected, “UJ”.

The LCS recovery of di-n-octyl phthalate was slightly above QC limits associated with SS61-MW25, SS61-MW25-A, SS61-MW24 and SS61-MW21. This compound was not detected in the samples and required no qualification.

Surrogates

The extractable hydrocarbons matrix spike analysis for all samples in lab package FA9328 yielded the surrogate recovery of o-terphenyl slightly above QC limits. The matrix spike samples were from another batch/lot. The data was not adversely affected and no qualification was necessary. Additionally, the same surrogate was slightly below control limits in the MS analysis of SS61-MW30, SS61-MW31 and SS61-MW26. The project sample used for the analysis yielded surrogates within control limits. Using professional judgment, no qualification was necessary.

The semi-volatile surrogate recovery of terphenyl-d14 was reported above QC limits in the confirmatory run of sample SS61-MW25 and the 2,4,6-tribromophenol recovery was above QC limits in the confirmatory run of sample SS61-MW25-A. More than one semi-volatile surrogate must be outside control limits to qualify the data; therefore, no qualification was necessary.

Matrix spike/matrix spike duplicates (MS/MSD)

For all lab packages the MS/MSD recoveries and/or relative percent difference (RPD) for all/or combination of the following were outside control limits: various volatile and semi-volatile compounds, TPH-DRO, TPH-ORO, COD, ammonia, iron, manganese and TKN. Oftentimes, the samples used for the matrix spike analyses were from another batch/lot. Precision and accuracy were cross reference with the LCS recoveries; which were in control or the specific analytes not detected in the samples. Therefore, no qualification was required based on matrix spike issues alone.

Project specific quality assurance/quality control

One field duplicate sample was submitted as part of this sampling group. The RPDs for benzene, sec-butylbenzene, tert-butylbenzene, isopropylbenzene, methylene chloride and n-propylbenzene were outside project defined control limits. These compounds were qualified estimated, "J", in both the parent and duplicate sample.

Compound quantitation and reporting limits

Where a dilution was required elevated reporting limits were reported.

Overall assessment of data

The post digestate spike was outside control limits for manganese associated with samples SS61-MW27, SS61-MW28, SS61-MW29, SS61-MW26, SS61-MW25, SS61-MW25-A and SS61-MW24 and iron associated with SS61-MW21 and SS61-MW23. Due to high level in the sample relative to spike amount the data was not adversely affected and required no qualification.

The serial dilution percent difference (%D) of iron was above QC limits for samples in package FA9288. Neither sample reported results >50x the method detection limit (MDL) and required no qualification. Additionally, the %D of manganese was above QC limits associated with SS61-MW23 and SS61-MW21. Both dissolved and total manganese in sample SS61-MW23 and total manganese in sample SS61-MW21 reported results >50x MDL and were qualified estimated, "J".

The RPDs for the laboratory duplicate analysis of iron (incl. ferrous in package FA9288) and BOD were above QC limits associated with several samples. Due to low duplicate and sample concentrations the RPDs were deemed acceptable.

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*
SS61-MW30	4-Bromophenyl phenyl ether Phenol	UJ UJ
SS61-MW31	4-Bromophenyl phenyl ether Phenol	UJ UJ
SS61-MW25	Benzene Sec-Butylbenzene Tert-Butylbenzene Isopropylbenzene Methylene chloride n-Propylbenzene Hydrogen sulfide	117 J 1.1 J 4.6 J 46.9 J 18.7 J 1.2 J 12.5 J
SS61-MW25-A	Benzene Sec-Butylbenzene Tert-Butylbenzene Isopropylbenzene Methylene chloride n-Propylbenzene Hydrogen sulfide	882 J 2.3 J 6.9 J 161 J 7.9 J 4.1 J 12.0 J
SS61-MW26	Hydrogen sulfide	0.50 UJ
SS61-MW24	Hydrogen sulfide	4.1 J
SS61-MW21	Hydrogen sulfide Total manganese Dissolved manganese BOD	5.1 J 1400 J 1390 J 14.8 J
SS61-MW23	Hydrogen sulfide Total manganese BOD	0.50 UJ 247 J 2.0 UJ

*volatiles and metals µg/l/ general chemistry in mg/l

Data Validation Report

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

Introduction

This data validation report covers samples taken from Holloman Air Force Base, New Mexico, on October 22-23, 2013. Soil sampling and analysis were performed on eight soil samples, one field duplicate and associated trip blanks from site SS-61 for VCM Performance Monitoring. All analyses were performed by Accutest Laboratories, Inc., Orlando, Florida. The specific samples included in this validation were:

<table>
<tr><th>Sample ID</th><th>Matrix</th><th>Lab Package</th><th>Collection Date</th><th>Analyses</th></tr>
<tr><td>SS61-SB68C-27</td><td rowspan="10">Soil</td><td rowspan="2">FA9327</td><td rowspan="6">10/22/13</td><td rowspan="10">VOCs (SW8260B), SVOCs (SW8270D), TPH-GRO/DRO/ORO (SW8015C)</td></tr>
<tr><td>SS61-SB69C-30</td></tr>
<tr><td>SS61-SB70C-28</td><td rowspan="6">FA9376</td></tr>
<tr><td>SS61-SB70C-28-A</td></tr>
<tr><td>SS61-SB71C-28</td></tr>
<tr><td>SS61-SB72C-29</td><td rowspan="4">10/23/13</td></tr>
<tr><td>SS61-SB73C-27</td></tr>
<tr><td>SS61-SB74C-28</td><td rowspan="2">FA9421</td></tr>
<tr><td>SS61-SB76C-30</td></tr>
</table>

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).

Sample Handling and Holding times

The samples were properly preserved and transferred under chain-of-custody to the laboratory for analysis and analyzed within the required holding times with the following exception. The semi-volatile confirmatory analysis of SS61-SB76C-30 was re-extracted and re-analyzed outside hold time. Since this run confirmed the reported non-detects of the primary run; no qualification was deemed necessary.

Blanks

No compounds were reported in any trip blank.

Diethyl phthalate was detected in the method blank associated with samples SS61-SB74C-28 and SS61-SB76C-30. This compound was not detected in either sample and required no qualification.

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

The LCS for vinyl chloride reported a sporadic marginal failure and subsequent recovery below QC limits. The associated samples (SS61-SB70C-28, SS61-SB71C-28 and SS61-SB73C-27) did not report detections for this compound but required a qualification of estimated non-detected, "UJ". The LCS recoveries for 3,3'-dichlorobenzidien and 4-

nitroaniline were recovered above QC limits associated with SS61-SB72C-29 and SS61-SB73C-27. These compounds were not detected in the sample and required no qualification.

Samples SS61-SB70C-28, SS61-SB70C-28-A and SS61-SB74C-28, along with the matrix spike analysis, yielded the TPH-GRO surrogate recoveries of aaa-trifluorotoluene and/or 4-bromofluorobenzene above control limits when reported from the FID. Due to the fact the surrogates were within control limits when reported from the more sensitive PID the data was not adversely affected and required no qualification.

Matrix spike/matrix spike duplicates (MS/MSD)

MS/MSD recoveries and/or relative percent difference (RPD) for various volatile, semi-volatile compounds and TPH extractable compounds were reported outside control limits. Precision and accuracy were cross reference with the associated LCS recoveries; which were in control and/or the compounds in question were not detected in the samples. Therefore using professional judgment no qualification of the data was necessary.

Project specific quality assurance/quality control

One field duplicate sample was submitted as part of this sampling event. The RPD for benzene, sec-butylbenzene, tert-butylbenzene, isopropylbenzene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, pyrene and TPH-GRO was outside project defined control limits due to possible sample non-homogeneity. These compounds were qualified estimated, “J”, in both sample and duplicate.

Compound quantitation and reporting limits

Where a dilution was required of the sample 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*
SS61-SB70C-28	Benzene	149 J
	Sec-Butylbenzene	9340 J
	Tert-Butylbenzene	6230 J
	Isopropylbenzene	67700 J
	Benzo(a)anthracene	170 J
	Benzo(a)pyrene	68.9 J
	Benzo(b)fluoranthene	109 J
	Benzo(k)fluoranthene	84.8 J
	Chrysene	180 J
	Fluoranthene	458 J
	Pyrene	425 J
	TPH-GRO	3890 J
	Vinyl chloride	UJ

Summary of Qualified Data

Sample ID	Parameter	Qualifier*
SS61-SB70C-28-A	Benzene	64.4 J
	Sec-Butylbenzene	1880 J
	Tert-Butylbenzene	1880 J
	Isopropylbenzene	8870 J
	Benzo(a)anthracene	70.7 J
	Benzo(a)pyrene	30.1 J
	Benzo(b)fluoranthene	51.5 J
	Benzo(k)fluoranthene	35 J
	Chrysene	80.1 J
	Fluoranthene	186 J
	Pyrene	181 J
	TPH-GRO	1320 J
SS61-SB71C-28	Vinyl chloride	UJ
SS61-SB73C-27	Vinyl chloride	UJ

* in µg/kg

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