F I N A L

FINAL DATA VALIDATION REPORT

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Prepared for

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List of Acronyms and Abbreviations

>	Greater Than
<	Less Than
≤	Less Than or Equal To
#	Number
%	Percent
CLP	Contract Laboratory Program
D	Duplicate or spike duplicate precision evaluation criteria not met
DoD	Department of Defense
DL	Detection Limit
DQO	Data Quality Objective
EB	Equipment Blank
ESC	ESC Lab Science
F	The analysis meets all qualitative identification criteria, but the measured concentration is less than the limit of quantitation
FB	Field blank contamination
FD	Field duplicate evaluation criteria not met
GRO	Gasoline Range Organics
H	Bias in sample result is high
I	Bias in sample result is indeterminate
ICS	Interference Check Samples
J	The analyte was positively identified; the associated numeric value is the approximate concentration of the analyte in the sample (i.e., estimated value).
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LD	Laboratory Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MS/MSD	Matrix Spike/Matrix Spike Duplicate
ND	Non-detect
NFG	National Functional Guidelines
PAHs	Polynuclear Aromatic Hydrocarbons
PARCCS	Precision, Accuracy, Representativeness, Analytical Completeness and Comparability, Sensitivity

List of Acronyms and Abbreviations

QAPP	Quality Assurance Project Plan
QC	Quality Control
RPD	Relative Percent Difference
RSK	Robert S. Kerr
SAP	Sampling and Analysis Plan
SM	Standard Methods
SOP	Standard Operating Procedure
SQL	Reported sample concentration is between the method detection limit and the sample quantitation limit
SVOCs	Semivolatile Organic Compounds
SW	Test Methods for Evaluating Solid Waste
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
U	The analyte was analyzed for, but was not detected.
UJ	The analyte was not detected. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
URS	URS Group, Inc.
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

This report presents results of the data validation conducted on chemical laboratory data for water samples collected during the November 2015 sampling event at Holloman Air Force Base, New Mexico. Data were collected by URS Group, Inc. (URS) in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14; Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

This report summarizes the findings from the validation and evaluations that were performed and the resulting qualifiers that were applied to the data.

The data validation report is organized as follows:

- Section 1 - Introduction
- Section 2 - A discussion of the data evaluation procedures
- Section 3 - An assessment of precision, accuracy, representativeness, analytical completeness, comparability and sensitivity (PARCCS)
- Section 4 - A summary of the quality control (QC) samples collected for this sampling event and any resultant data qualification.
- Appendix A - The individual data review summaries and qualified data sheets for the seven data packages, and

In accordance with the QAPP, data validation was conducted on all chemical laboratory data.

Samples were sent to ESC Lab Sciences (ESC) of Mount Juliet, Tennessee for analysis by the analytical methods listed in Table 2.1.

Table 2.1: List of Analytical Methods

Analytical Method	Analyte
EPA SW8260B	VOCs
EPA SW8270C SIM	PAHs
EPA SW8270C	SVOCs
RSK-175	Methane
EPA SW6020	Total/Dissolved Metals
EPA 9056	Nitrate, Sulfate
SM4500S	Sulfide
SM2540C	TDS

EPA – U.S. Environmental Protection Agency
Physical/Chemical Methods (SW-846)
PAHs – Polynuclear Aromatic Hydrocarbons
RSK – Robert S. Kerr
SM – Standard Methods
SW – Test Methods for Evaluating Solid Waste
SVOCs – Semivolatile Organic Compounds
TDS – Total Dissolved Solids
VOCs – Volatile Organic Compounds

The data review was conducted by URS in accordance with DoD QSM 4.2, data validation SOP 14 provided in the QAPP (URS, September 2014), and evaluation of method criteria, as applicable.

Data validation SOP 14 was developed using guidance from the United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Inorganic Data Review (October 2004) and USEPA CLP NFG for Organic Data Review (June 2008). Data validation flags were assigned using guidance from or as described in the data validation SOP 14 (URS). In cases where flagging criteria were not provided in the data validation SOP, professional judgment was used and documented in each individual data review summary (Appendix A). Table 2.2 summarizes the final data validation qualifiers used in the database. In the process of validation, reason and bias qualifiers were also applied for informational purposes regarding the validation findings. Table 2.3 summarizes the data validation qualifier reason and bias direction codes. These reason codes are applied to the qualified results forms and the application explained in each data validation summary, both included in Appendix A. Laboratory sample results were reported by ESC in ten data packages.

Data packages were reviewed by URS to determine compliance with the QAPP as applicable to the method. The parameters evaluated during validation included chain of custody review, sample receipt conditions, holding times, method blanks, continuing calibration blanks, trip blanks, laboratory control sample (LCS) recoveries, serial dilution results, post-digestion spike recoveries, interference check samples (ICS), internal standard results, surrogate recoveries, initial and continuing calibrations, and any issues identified in the laboratory case narrative. Review of these parameters is discussed in the individual review narratives (Appendix A). Additionally, each data package was reviewed by URS for the following parameters to determine compliance with project-specific requirements: matrix spike/matrix spike duplicate (MS/MSD) recoveries and precision, laboratory duplicate (LD) samples, field duplicate (FD) samples (as

applicable), field blanks, and equipment blanks (EB). The overall qualification of sample results following review of these QC samples is presented in Section 4.

The data packages listed below were also selected for an evaluation of the following: examination of tuning criteria, target compound identification and result recalculation. Collectively, these parameters represent 10% of the November 2015 sampling event validated, consistent with the QAPP requirement of 2% of the data be evaluated for tuning criteria, target compound identification and result recalculation.

- Data Package L800773 – volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), semivolatile organic compounds (SVOCs), methane, total metals, dissolved metals, anions, sulfide, and total dissolved solids (TDS)

Table 2.2: Data Validation Qualifier Definitions

Qualifier	Definitions [1]
U	The analyte was analyzed for, but was not detected.
J	The analyte was positively identified; the associated numeric value is the approximate concentration of the analyte in the sample (i.e., estimated value).
NJ	Tentatively identified.
UJ	The analyte was not detected. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
F	The analysis meets all qualitative identification criteria, but the measured concentration is less than the limit of quantitation
R	The data are unusable and have been rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

1 Definitions cited were modified after the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, June 2008.

Table 2.3: Data Validation Qualifier Reason and Bias Direction Codes

Qualifier Code	Data Quality Condition Resulting in Assigned Qualification
General Use	
HT	Holding time requirement was not met
P	Preservation requirement(s) not met
MB	Method blank or preparation blank contamination
LCS	Laboratory control sample evaluation criteria not met
MS	Matrix spike and/or matrix spike duplicate accuracy evaluation criteria not met
D	Duplicate or spike duplicate precision evaluation criteria not met
TB	Trip blank contamination
FB	Field blank contamination
RB	Rinsate blank contamination
FD	Field duplicate evaluation criteria not met
TvP	Partial analysis results greater than total analysis results; difference is great than accuracy limitations of the method
ID	Target compound identification criteria not met
IS	Internal standard evaluation criteria not met
CO	Suspected carry-over from previously analyzed samples
SQL	Reported sample concentration is between the method detection limit and the sample quantitation limit.
RL	Reporting limit exceeds decision criterion (for non-detects)
LR	Reported concentration is over linear range without re-analysis
TUNE	Instrument performance (tuning) criteria not met
ICAL	Initial calibration evaluation criteria not met
Inorganic Methods	
ICV	Initial calibration verification evaluation criteria not met
CCV	Continuing calibration verification evaluation criteria not met
CCB	Continuing calibration blank contamination
ICS	Interference Check Sample evaluation criteria not met
PDS	Post-digestion spike recovery outside acceptance range
MSA	Method of standard additions correlation coefficient < 0.995
DL	Serial dilution results did not meet evaluation criteria
Organic Methods	
CCAL	Continuing calibration evaluation criteria not met
SUR	Surrogate recovery outside acceptance range

Table 2.3: Data Validation Qualifier Reason and Bias Direction Codes

Qualifier Code	Data Quality Condition Resulting in Assigned Qualification
Bias Codes	**Bias Direction**
H	Bias in sample result likely to be high
L	Bias in sample result likely to be low
I	Bias in sample result is indeterminate

This section summarizes the validation performed and the overall quality of the data through assessment of the various data quality objectives (DQOs) and their applicability to the PARCCS parameters. The individual validation reports are provided in Appendix A.

The data validation provides a system for the evaluation and documentation of the quality and usability of project data (i.e., whether or not the data are of sufficient quality to support their intended use in project decision making). Outliers in terms of precision and accuracy are assessed in accordance with the data validation SOP, DoD QSM 4.2, and using guidance from EPA NFGs. Data may be qualified as estimated when QC results are outside of the QAPP-defined measurement quality objectives. Unqualified data may be used for all project decisions for which they were generated. Qualified data are generally still of sufficient quality to support their use in project decision making. Data are rejected when QC results are unacceptable, and rejected data are not usable for project decision making. Several benzoic acid sample results were rejected from the November 2015 sampling event as noted in Sections 3.2.1.1 and 3.2.2.1.

This section presents precision, accuracy, representativeness, analytical completeness, comparability, and sensitivity (i.e., PARCCS parameters), with respect to the water investigation sampling event.

3.1 PRECISION

Precision is a quantitative term that estimates the reproducibility of a set of replicate measurements under a given set of conditions. It is defined as a measurement of mutual agreement between measurements of the same property, and is expressed in terms of relative percent difference (RPD) between duplicate determinations.

The precision for the reported data was evaluated through a review of the RPD between LD results, MS/MSD results, LCS and LCS duplicate (LCSD) results, and FD results.

3.1.1 Field Quality Control Samples

3.1.1.1 Field Duplicates

A field duplicate sample is a second separate sample volume collected at the same location as the original sample; homogenization is not performed between the original sample and the field duplicate. The water field duplicate samples were collected using identical recovery techniques, and treated in an identical manner during storage, transportation, and analysis to assess precision of field sample collection. For this sampling event, three field duplicate samples were collected, satisfying the QAPP requirement of one per twenty environmental samples. The RPDs between all FD results satisfied the applicable evaluation criterion, indicating acceptable precision was attained with respect to the analytical method and sample matrix.

FD sample results were evaluated using the following performance criteria from QAPP Worksheet #12:

- When both the sample and duplicate values are >5x limit of quantitation (LOQ), acceptance is indicated by a RPD between the results of 30% or less.
- Where the result for one or both analytes is <5x LOQ, satisfactory precision is indicated if the absolute difference between the results is <2x LOQ.

The comparison between parent sample and FD results met the above criteria. Overall, greater than 96% of the FD results met the above-listed precision criteria.

3.1.2 Matrix-Dependent Quality Control

3.1.2.1 Matrix Spike Duplicates

Matrix spike and matrix spike duplicate samples were prepared by spiking additional aliquots of samples with known concentrations of all project target analytes. The RPD between the MS and MSD is used to evaluate the precision of the sampling and analysis. MS/MSD is used to document the bias of a method due to sample matrix. A minimum of one MS and one MSD was analyzed for every 20 environmental aliquots tested. MS/MSD samples were not required for the equipment blanks.

With the exceptions noted in the individual narratives, the MS/MSD RPDs met the QAPP performance criteria. Table 4.1c provides a summary of analytes with greater than 35% of RPDs outside acceptance limits, resulting in overall qualifiers. In instances of less than 35%, only the parent result was considered for qualification. Overall, the RPDs of all the site-specific MS/MSD results satisfied the applicable evaluation criterion, indicating acceptable precision was attained with respect to the analytical method and sample matrix.

3.1.2.2 Laboratory Duplicates

A laboratory duplicate was prepared and analyzed in the same manner as the parent sample. The LD is used to assess the precision of the method due to sample matrix for those methods not using an MSD (e.g. TDS). A minimum of one LD was analyzed for every 20 environmental aliquots analyzed, as applicable to the analytical method. For this event, one laboratory duplicate was performed.

The following criteria were used to evaluate the laboratory duplicate results:

- When both results are >5x LOQ, acceptable analytical precision is indicated by an RPD between the results of ≤20% for aqueous samples and ≤35% for soil and sediment samples.
- Where the result for one or both analysis of the laboratory duplicate pair is ≤5x LOQ, satisfactory precision is indicated if the absolute difference between the laboratory duplicate results is ≤1x the greater LOQ for aqueous samples and ≤2x the greater LOQ for soil and sediment samples.

The RPDs of all of the LD results satisfied the applicable evaluation criterion, indicating acceptable precision was attained with respect to the analytical method and sample matrix.

3.1.3 Method-Specific Quality Control Measures

3.1.3.1 Laboratory Control Sample Duplicates

The LCS and LCSD are analyte-free (non-detect at the specified reporting limit) waters or solids spiked with all analytes. The LCS/LCSD was carried through the digestion/ extraction and analysis procedure. The LCS is used to evaluate each analytical batch and to determine if the

method is in control. An LCS was prepared with each analytical batch. Greater than 99% of the RPDs between LCS and LCSD results satisfied the applicable evaluation criterion, indicating acceptable precision was attained with respect to the analytical method.

3.2 ACCURACY

Accuracy is defined as the difference between the measured value and the actual value. Accuracy was evaluated through review of the LCS recoveries, MS/MSD recoveries, and surrogate recoveries, as applicable for the selected methods.

3.2.1 Matrix-Dependent Quality Control

3.2.1.1 Matrix Spike Recoveries

MS and MSD samples were prepared by spiking additional aliquots of samples with known concentrations of all project target analytes. The aliquots for MS and MSD were obtained in the same preparation and analytical procedures as the environmental samples. The MS recovery is used to evaluate the accuracy and bias of the analyses with respect to the site-specific matrix. A minimum of one MS and one MSD were analyzed for every 20 environmental aliquots tested, as applicable to the analytical method. MS/MSD samples were not required for the equipment blanks.

With the exceptions noted in the individual narratives, the MS/MSD percent recoveries met the QAPP performance criteria. Table 4.1b provides a summary of analytes with greater than 35% of percent recoveries outside acceptance limits, resulting in overall qualification. In instances of less than 35%, only the parent result was considered for qualification. Overall, greater than 99% of the site-specific MS recoveries were within the acceptance limits indicating acceptable accuracy was attained with respect to the analytical method and sample matrix.

3.2.2 Laboratory and Method-Specific Quality Control Measures

3.2.2.1 Laboratory Control Sample

The LCS and LCSD samples were performed as described in Section 3.1.3.1. Overall, greater than 98% of the LCS recoveries were within the acceptance limits indicating acceptable accuracy was attained with respect to the analytical method.

3.2.2.2 Surrogate Recoveries

Surrogates are organic compounds that are similar to the target analyte(s) in chemical composition and behavior in the analytical process, but that are not normally found in environmental samples. Surrogates are used to evaluate accuracy, method performance, and extraction efficiency. Surrogates were added to all environmental samples, controls, and blanks, in accordance with the method requirements during sample preparation or extraction, but prior to analyses. Overall, all of the surrogate recoveries were within the acceptance limits indicating acceptable accuracy, method performance, and extraction efficiency was attained.

3.3 REPRESENTATIVENESS

Representativeness is a qualitative term that expresses the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness was maintained during sampling efforts by consistently sampling in compliance with the Sampling and Analysis Plan (SAP), prescribed methods, and relevant SOPs.

3.4 COMPARABILITY

Comparability expresses the confidence with which one data set can be compared to another. Strict adherence to prescribed standard sample collection procedures, analytical detection limits, and analytical methods are important factors for the data from like samples and sample conditions to be comparable. This comparability is independent of laboratory personnel, data reviewers, or sampling personnel.

Data are comparable if collection techniques, measurement procedures, and method and reporting processes are equivalent for the samples within a sample set. To maximize comparability, all samples covered by this report were collected and analyzed in accordance with the SAP and relevant SOPs, such that consistent protocol and techniques were used for all project samples. Consistency in sample collection was accomplished through adherence to sample collection and management SOPs. This is further demonstrated by the acceptable precision and accuracy during different parts of the laboratory process which is discussed in detail above in the Precision and Accuracy Sections, including the respective acceptance criteria established for the project and included in the QAPP.

3.5 ANALYTICAL COMPETENESS

Completeness is defined as the ratio of the number of valid analytical results (for this calculation, valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis.

As a result of data review, 40 benzoic acid results were qualified as unusable (rejected) out of 8,852 total results for the project (i.e., >0.5%). As such, the overall analytical completeness for this program is >99%. The QAPP defined analytical completeness goal is 90%. This completeness goal was met.

3.6 SENSITIVITY

LOQs are established by the analytical laboratory based on the detection limits (DLs) and limits of detection (LODs). The DL is a statistically determined value specific to the laboratory and to each instrument, defined as the concentration of an analyte that produces a signal with a 99 percent probability that the concentration is above that of a blank. The DL represents the best fundamental measurement of instrument sensitivity and the basis for establishing quantitation limits. The DL is below the lowest point on the calibration curve, which is often considered the LOQ. When an analyte was not detected (U), the result is reported as undetected, "U", meaning not detected at the LOD. Some samples were analyzed at dilutions due to matrix interference and

the LODs were elevated accordingly. The laboratory reported positive results between the DL and the LOQ. These results were qualified as estimated during the data review (F SQL-I).

Due to blank contamination or dilutions required, several samples were reported as non-detect at elevated LODs. These non-detect results will need to be evaluated by the end user of the data with respect to project objectives. Any contaminant of potential concern above the current applicable screening level will be discussed in the Interim Measures Report.

QC samples collected and analyzed during the sampling event included samples selected for MS/MSD analysis, laboratory duplicate samples, field duplicate samples, and field blanks. Section 4 presented the overall accuracy and precision with respect to each analyte. This section presents, an overall assessment for the data performed by evaluating the QC samples representing the sample matrix. As QC samples (e.g., MS/MSD) are only collected at a frequency of 1 per 20 samples, the results are assessed collectively to see the impact on the data set and to evaluate whether qualification should be extended to all samples. Therefore, the following evaluation was performed to determine if qualification was limited to the parent sample or if qualification was extended to all samples. Consistent with SOP 14, when QC issues for MS/MSD, laboratory duplicates, field duplicates, or equipment blanks accounted for less than 35% of the QC analyses, applicable data qualification was limited to qualification of the associated parent samples. When QC issues for MS/MSD, laboratory duplicates, field duplicates, or equipment blanks accounted for more than 35% of the QC analyses conducted, applicable data qualification was extended to all site-specific samples.

4.1 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were performed on the samples listed in the table below. This number of MS/MSD samples met the QAPP-required frequency of one set per twenty site samples per matrix.

Table 4.1a: November 2015 MS/MSD Samples

Sample Identification	Data Package	Analyses
TU904-MW15-ND01	L800773	Dissolved Metals
TU904-MW15-NT01		VOCs, SVOCs, PAHs, Methane, Total Metals, Nitrate, Sulfate, Sulfide
TU518-MW06-NT01	L800806	VOCs, SVOCs, PAHs, Total Metals
TU518-MW06-ND01		Dissolved Metals
SS018-MW16-NT01	L800817	Total Mercury
TU506-MW05-NT01	L8011001	VOCs, SVOCs, PAHs, Total Metals
TU506-MW05-NT01		6020 Dissolved Metals
TU515-MW01-ND01	L801111	

PAHs – Polynuclear Aromatic Hydrocarbons
SVOCS – Semi Volatile Organic Compounds
VOCs – Volatile Organic Compounds

As applicable, qualifiers have been applied to the parent samples when the recoveries were outside the QAPP limits (Appendix A). In addition, the site-specific MS and MSD results were assessed collectively to evaluate potentially systematic matrix effects and to determine the need for qualification of associated sample results of similar matrix.

With the exceptions listed in the table below, <35% of the MS and MSD percent recoveries or RPDs were outside limits; therefore, data qualification has been limited to the parent sample results for these analytes. The tables below presents the analytes where >35% of the MS and MSD percent recoveries and RPDs were outside limits and data qualification has been applied to associated samples. The details of each MS/MSD analysis pair and qualification to parent samples are provided in the individual data review summaries (Appendix A).

Table 4.1b: November 2015 MS/MSD Recovery Overall Qualifiers

Analyte	# of MS/MSD Below Control Limits	# of MS/MSD Above Control Limits	Total # of MS/MSD	% MS/MSD Outside of Control Limits	Qualification
SVOCs					
4-Nitroaniline	0	4	6	67%	As the potential bias was considered to be high, and the associated 4-nitroanailine results were reported as non-detect, data qualification was not considered necessary.
PAHs					
Acenaphthylene	0	3	6	50%	As the potential bias was considered to be high, the associated detected acenaphthylene results were qualified as estimated (J MS-H).
Dissolved Metals					
Arsenic	0	3	8	38%	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J MS-H).
Beryllium	0	4	8	50%	
Copper	0	3	8	38%	
Selenium	0	3	8	38%	
Vanadium	0	3	8	38%	

– Number
% – Percent
H – High Bias
J – Estimated
MS – Matrix Spike
MSD – Matrix Spike Duplicate
PAHs – Polynuclear Aromatic Hydrocarbons
SVOCs – Semivolatile Organic Compounds

Table 4.1c: November 2015 MS/MSD RPD Overall Qualifiers

Analyte	# of MS/MSD RPDs Outside Control Limits	Total # of MS/MSD RPDs	% MS/MSD Outside of Control Limits	Qualification
SVOCs				
2,4-Dinitrophenol	2	3	67%	As the RPD was outside of control limits, the associated 2,4-dinitrophenol results were qualified as estimated (UJ/J D-I).

– Number
% – Percentage
D – Duplicate
I – Indeterminate Bias
MS – Matrix Spike
MSD – Matrix Spike Duplicate
UJ/J – Estimated

4.2 LABORATORY DUPLICATES

The following laboratory duplicate pairs were analyzed in association with this sampling event. This number of laboratory duplicate samples met the QAPP-required frequency of one set per twenty site samples per matrix, as applicable to the method.

Table 4.2: November 2015 Laboratory Duplicate Samples

Sample Identification	Data Package	Analyses
TU904-MW17-NT01	L800773	Nitrate, Sulfate
TU904-MW20-NT01		
TU904-MW08-DT01		TDS
TU904-MW08-NT01		
TU904-MW16-NT01		Sulfate
TU904-MW10-NT01		
TU904-MW19-NT01		TDS
TU508-MW01-NT01	L800817	
TU503-TMW12-NT01	L800823	

TDS – Total Dissolved Solids

The laboratory duplicate results were assessed collectively to evaluate potentially systematic matrix effects and to determine the need for qualification of associated sample results of similar matrix.

There were no analytes where >35% of the laboratory duplicate results did not meet the concentration-dependent criteria. Further action was not necessary.

The details of each laboratory duplicate pair and qualification to parent samples are provided in the individual data review summaries (Appendix A).

4.3 FIELD DUPLICATE SAMPLES

The following field duplicate pairs were collected in association with this sampling event. This number of field duplicate samples met the QAPP-required frequency of one set per twenty site samples per matrix.

Table 4.3: November 2015 Field Duplicate Samples

Field Duplicate Pair	Data Package	Analyses
TU904-MW08-NT01/ TU904-MW08-DT01	L800773	VOCs, SVOCs, PAHs, Methane, Total Metals, Inorganics
TU904-MW08-ND01/ TU904-MW08-DD01		Dissolved Metals
SS018-MW16-ND01/ SS018-MW16-DD01	L800817	
SS018-MW16-NT01/ SS018-MW16-DT01		VOCs, SVOCs, PAHs, Total Metals, TDS
TU503-MW02-ND01/ TU503-MW02-DD01	L800823	Dissolved Metals
TU503-MW02-NT01/ TU503-MW02-DT01		VOCs, SVOCs, PAHs, Total Metals, TDS

PAHs – Polynuclear Aromatic Hydrocarbons SVOCs – Semivolatile Organic Compounds TDS – Total Dissolved Solids
VOCs – Volatile Organic Compounds
Inorganics – Nitrate, sulfite, sulfide, TDS

The field duplicate results were assessed collectively to evaluate potentially systematic matrix effects and to determine the need for qualification of associated sample results of similar matrix.

There were no analytes where >35% of the field duplicate results did not meet the concentration-dependent criteria. Further action was not necessary.

4.4 FIELD BLANKS

The following field blank was collected in association with this sampling event. This number of field blank samples met the QAPP-required frequency for all analyses of one per twenty site samples per matrix.

Table 4.4a: November 2015 Field Blank Samples

Field Blank Identification	Data Package	Analyses
FIELD BLANK-FT01	L801106	GRO*
FIELD BLANK-FT02		
FIELD BLANK-FT03		
FIELD BLANK-FT07	L800830	VOCs
FIELD BLANK-FT08	L801106	
FIELD BLANK-FT09		
FIELD BLANK-FT10		
FIELD BLANK-FT11	L800830	
FIELD BLANK-FT12	L801106	

GRO – Gasoline Range Organics VOCs – Volatile Organic Compounds
*GRO is only reported with the soil results from TU515, which were evaluated in a separate validation report.

The table below presents the analytes that were detected in the field blank at a frequency >35% and data qualification that has been applied to associated samples.

Table 4.4b: November 2015 Field Blank Overall Qualifiers

Analyte	# of FBs with Detection	Total # of FBs	% FBs with Detection	Qualification
Chloroform	6	6	100%	Results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U FB-I).

< – Less Than # – Number % – Percent
FB – Field Blank I – Indeterminate Bias U – Non-detect

4.5 EQUIPMENT BLANKS

Disposable equipment was used for sample collection. Therefore, an equipment blank was not required. Further action was not necessary.

Department of Defense (DoD) 2010. Quality Systems Manual for Environmental Laboratories, Version 4.2. December.

Environmental Protection Agency (EPA) 2004.Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review. October.

Environmental Protection Agency (EPA) 2008.Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review. June.

URS Group, Inc. (URS) 2014. Final Interim Measures Work Plan – Appendix A Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904. September.

URS Group, Inc. (URS) 2014. Final Interim Measures Work Plan – Appendix A Sampling and Analysis Plan/Quality Assurance Project Plan: Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515). September.

URS Group, Inc. (URS) 2014. Final Interim Measures Work Plan – Appendix A Sampling and Analysis Plan/Quality Assurance Project Plan: Group 3 Former Underground Storage Tank Site: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518). August.

Appendix A

Individual Data Review Summaries and Qualified Data Sheets

Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L800773
Sampling Event Dates: November 11-12, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): Yes
Data Reviewer: Katie Abbott, URS Project Chemist
Date Completed: January 25, 2016
Peer Reviewer: Sheri Fling, URS Project Quality Assurance Manager (QAM)

The table below summarizes the data package and sample identifications discussed in this data review.

Field Identification	Sample Type	Lab Identification	Matrix	Analyses						
				VOCs	SVOCs	PAHs	RSK-175	Total Metals	Dissolved Metals	Inorganics
TU904-MW17-ND01	SA	L800773-01	Water	---	---	---	---	---	X[1]	---
TU904-MW17-NT01	SA	L800773-02	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW20-NT01	SA	L800773-03	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW20-ND01	SA	L800773-04	Water	---	---	---	---	---	X[1]	---
TU904-MW21-ND01	SA	L800773-05	Water	---	---	---	---	---	X[1]	---
TU904-MW21-NT01	SA	L800773-06	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW13-NT01	SA	L800773-07	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW13-ND01	SA	L800773-08	Water	---	---	---	---	---	X[1]	---
TU904-MW08-DT01	FD	L800773-09	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW08-ND01	SA	L800773-10	Water	---	---	---	---	---	X[1]	---
TU904-MW08-NT01	SA	L800773-11	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW08-DD01	FD	L800773-12	Water	---	---	---	---	---	X[1]	---
TU904-MW01-ND01	SA	L800773-13	Water	---	---	---	---	---	X[1]	---
TU904-MW01-NT01	SA	L800773-14	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW07-NT01	SA	L800773-15	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW07-ND01	SA	L800773-16	Water	---	---	---	---	---	X[1]	---
TU904-MW11-ND01	SA	L800773-17	Water	---	---	---	---	---	X[1]	---
TU904-MW11-NT01	SA	L800773-18	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW06-ND01	SA	L800773-19	Water	---	---	---	---	---	X[1]	---
TU904-MW06-NT01	SA	L800773-20	Water	X	X	X	X	X[1]	---	X[2]

Field Identification	Sample Type	Lab Identification	Matrix	Analyses						
				VOCs	SVOCs	PAHs	RSK-175	Total Metals	Dissolved Metals	Inorganics
TU904-MW16-ND01	SA	L800773-21	Water	---	---	---	---	---	X[1]	---
TU904-MW16-NT01	SA	L800773-22	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW18-ND01	SA	L800773-23	Water	---	---	---	---	---	X[1]	---
TU904-MW18-NT01	SA	L800773-24	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW03-ND01	SA	L800773-25	Water	---	---	---	---	---	X[1]	---
TU904-MW03-NT01	SA	L800773-26	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW02-ND01	SA	L800773-27	Water	---	---	---	---	---	X[1]	---
TU904-MW02-NT01	SA	L800773-28	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW14-NT01	SA	L800773-29	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW14-ND01	SA	L800773-30	Water	---	---	---	---	---	X[1]	---
TU904-MW10-ND01	SA	L800773-31	Water	---	---	---	---	---	X[1]	---
TU904-MW10-NT01	SA	L800773-32	Water	X	X	X	X	X[1]	---	X[2]
TU904-MW15-ND01	SA	L800773-33	Water	---	---	---	---	---	X[1,m]	---
TU904-MW15-NT01	SA	L800773-34	Water	X[m]	X[m]	X[m]	X[m]	X[1,m]	---	X[2,m]
TU904-MW04-NT01	SA	L800773-35	Water	X	X	X	X	X	---	X
TU904-MW04-ND01	SA	L800773-36	Water	---	---	---	---	---	X	---
TU904-MW19-NT01	SA	L800773-37	Water	X	X	X	X	X	---	X
TU904-MW19-ND01	SA	L800773-38	Water	---	---	---	---	---	X	---

Sample Type: FD – Field Duplicate SA – Sample
X^m - Matrix Spike/Matrix Spike Duplicate

Analyses: Inorganics – Anions – Nitrate, Sulfate (9056), Sulfide (SM4500S), Total Dissolved Solids (SM2540C)
Total/Dissolved Metals – Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Cobalt, Lead, Manganese, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc (6020); Mercury (7470A)
PAHs – Polynuclear Aromatic Hydrocarbons (8270C SIM)
RSK-175 – Robert S. Kerr: Methane
SIM – Selective Ion Monitoring
SVOCs – Semivolatile Organic Compounds (8270C)
VOCs – Volatile Organic Compounds (8260B)

[1]Metals (6020) analysis includes iron.
[2]Inorganic analysis includes nitrate, sulfate, and sulfide.

The data review was conducted in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14; Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

General Overall Assessment:

_____ Data are usable without qualification.
_____ Data are usable with qualification (noted below).
__X__ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any laboratory case narrative comments concerning data qualification were addressed in the table below.

Trace level detects, reported between the method detection limit (MDL) and the reporting limit (LOQ), have been qualified as estimated (F SQL-I). All other occurrences of data qualification are covered in the following table.

Review Parameter	Criteria Met?	Comment
Chain of Custody & Sample Receipt	No	The samples were received by ESC Lab Sciences in good condition and were consistent with the accompanying chain of custody (COC). The cooler temperatures upon receipt were within the recommended ≤6 degrees Celsius (°C) temperature range. The samples were shipped to the laboratory with the volatile organic analysis (VOA) vials for the volatile organic compounds (VOCs) analysis in one cooler and the other sample containers (e.g., metals) in separate coolers. A complete signed original COC was included in each of the coolers with a footnote that stated the following: the circled analyses represent those analyses for which bottles are contained in this cooler. However, upon arrival at the laboratory, sample receiving discarded one of the two COCs submitted for each sample assuming one COC was a duplicate. As this had no impact on sample login or reporting of results, data qualification was not necessary. Trip blanks samples were included in each cooler containing samples to be analyzed for VOCs and gasoline range organics (GROs). However, upon receipt the trip blank samples and the field blank samples were logged into two data packages and therefore, not reported with the samples from the same cooler. The associated trip blanks were identified based on the field notes and qualification was only extended to results for those samples shipped in the same cooler as the trip blank. The field blanks were assessed collectively and any resultant qualification was discussed in Section 4.4 of the validation report.
Reporting	Yes	**Revised Reports** Revised reports were required to remove 2-chloronaphthalene from the polynuclear aromatic hydrocarbon (PAH) analyte list, correct the methyl cyclohexane results, and remove ethane and ethene from the Robert S. Kerr (RSK)-175 analyte list. **Method 8260B (VOCs)** During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference spectra taken from the instrument calibration, the analyst was not seeing the improper alignment of spectra noted in the data package during his/her

Review Parameter	Criteria Met?	Comment
		review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding. **Method 8270C Semivolatile Organic Compounds (SVOCs)** The results for 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene were not reported by Method 8270C SVOCs but were reported by Method 8260B VOCs. As the detection limits (DLs), limits of detection (LODs), and limits of quantitation (LOQs) are lower by Method 8260B, further action was not necessary. The laboratory noted 4-methylphenol cannot be reported as 3 & 4-methylphenol coelute during the analysis; therefore, the analytes are reported together and 3&4-methylphenol on the data sheets and in the electronic database.
Holding Times	No	Samples TU904-MW17-NT01, TU904-MW20-NT01, TU904-MW21-NT01, TU904-MW13-NT01, TU904-MW08-DT01, TU904-MW08-NT01, and TU904-MW01-NT01 were analyzed 2-21 hours outside the method required holding time of 48 hours for nitrate. The associated nitrate results were qualified as estimated (J HT-I).
Laboratory Blanks • Method Blank • Continuing Calibration Blank	No	With the exceptions listed in Table 1, target analytes were not detected within the method or calibration blanks.
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate TU904-MW15-ND01 (Dissolved Metals) TU904-MW15-NT01 (RSK-175, Nitrate, Sulfate, Sulfide, Total Metals, VOCs, SVOCs, PAHs) • Total vs. Partial Analyses (Metals) • Laboratory Duplicate TU904-MW17-NT01 (Nitrate, Sulfate) TU904-MW20-NT01 (Nitrate, Sulfate) TU904-MW08-DT01 (TDS) TU904-MW08-NT01 (TDS) TU904-MW16-NT01 (Sulfate) TU904-MW10-NT01 (Sulfide) TU904-MW19-NT01 (TDS)	No	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the quality assurance project plan (QAPP) requirement of one per twenty samples. With the exception listed in Table 2, the MS/MSD recoveries and relative percent differences (RPDs) met quality control criteria. Results in the native sample greater than four times the concentration of the spike added during digestions/extractions are not considered to be a representative measure of accuracy. Further action with respect to spike recovery evaluation or qualification of data was not considered necessary. Consistent with standard operating procedure (SOP) 14, when MS/MSD issues accounted for less than 35% of the MS/MSD analyses conducted, applicable data qualification was limited to qualification of the parent sample of the affected analyte. When >35% of the MS/MSD results did not meet criteria, evaluation was extended to all associated samples. See Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation. **Total vs. Partial Analyses (Metals)** Consistent with SOP 14, results for the total analysis of a particular analyte should be greater than the results for a partial analyte of that analyte. The following criteria were used to evaluate the total versus dissolved results: • In instances where the value for a partial analysis exceed that for a total analysis and both of the results are >5xLOQ, the criterion utilized is that the two values should agree within ±30%. • In instances where the value for a partial analysis exceeds that for a total analysis and either of the results is 5xLOQ, the absolute difference

Review Parameter	Criteria Met?	Comment
		between the results is compared against an evaluation criterion of 2xLOQ. With the exceptions listed in Table 3, the total metal sample results and associated dissolved sample results met the concentration-dependent criteria. **Laboratory Duplicate** The comparison between results of the laboratory duplicate pair met the criteria listed below. • When both the sample and duplicate values are >5xLOQ acceptable sampling and analytical precision is indicated by a RPD between the results of ≤20% for water samples (≤35% for soil samples). • Where the result for one or both analytes of the laboratory duplicate pair is <5xLOQ, satisfactory precision is indicated if the absolute difference between the laboratory duplicate results is <1xLOQ for water samples (<2xLOQ for soil samples).
Metals Only • Serial Dilution TU904-MW15-ND01 (Dissolved 6020) TU904-MW15-NT01 (Total 6020)	No	**Serial Dilution (Metals Only)** Consistent with the method, only the results that were greater than 50 times their respective DLs were appropriate for comparing to the serial dilution evaluation criterion. With the exceptions listed in Table 4, all percent differences (%Ds) between the original sample results and the results obtained from the sample-diluted 1:5 were ≤10%.
Method Quality Control • Surrogates (VOCs, PAHs, SVOCs)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank None in this package • Field Duplicate TU904-MW08-NT01/ TU904-MW08-DT01 TU904-MW08-ND01/ TU904-MW08-DD01 • Equipment Blank None in this package • Field Blank None in this package	No	**Trip Blank** A trip blank sample was submitted with the coolers; it was reported and evaluated in separate data packages (L800830 and L801106). **Field Duplicate** The frequency of field duplicates met the QAPP requirement of one per twenty samples. With the exceptions listed in Table 5, the comparison between results of the field duplicate pair met the criteria listed below. • When both the sample and duplicate values are >5xLOQ acceptable sampling and analytical precision is indicated by an RPD between the results of ≤30% for water samples (≤50% for soil samples). • Where the result for one or both analytes of the field duplicate pair is <5xLOQ, satisfactory precision is indicated if the absolute difference between the field duplicate results is <2xLOQ for water samples (<3.5xLOQ for soil samples). Consistent with SOP 14, when field duplicate issues accounted for less than 35% of the field duplicate analyses conducted, applicable data qualification was limited to qualification of the parent sample for the affected analyte. When >35% of the field duplicate results did not meet criteria, evaluation was extended to all associated samples. See Section 4.3 of the data validation report for overall qualifiers resulting from the field duplicate evaluation.

Review Parameter	Criteria Met?	Comment
		Equipment Blank As dedicated equipment was used to collect these samples, an equipment blank was not submitted for this sampling event. Further action was not necessary. **Field Blank** The frequency of field blanks met the QAPP requirement of one per twenty samples. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.
LODs met?	No	Due to dilutions, several metals results were reported as non-detect or estimated at elevated LODs. See Section 3.6 of the validation report for further discussion.
Other Parameters	Yes	Naphthalene (8260B and 8270C- PAHs) and hexachloro-1,3-butadiene and 1,2,4-trichlorobenzene (8260B and 8270C) were analyzed by multiple methods. Results were selected for reporting using the following criteria: • If both results were non-detect, the non-detect result with the lower DL was selected. • If both results were reported as detected, the higher detected result was selected for reporting. • If one result was reported as non-detect and the other result was reported as detected, the detected result was selected for reporting.
Laboratory Performance Review		
Initial Calibration	Yes	**Methods 8260B VOCs & 8270C SVOCs** A minimum relative response factor (RRF) of 0.05 was used for the system performance check compounds (SPCCs) and all SPCCs met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a requirement of 15% was used. The %RSD values for all target analytes in the calibration were less than 15%. Therefore, the initial calibration met method acceptance criteria. **Methods 8270C PAHs & RKS-175** The %RSD values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **Methods 6020 (Inductively Coupled Plasma Mass Spectrometer (ICPMS) Metals), 7470A Mercury, Anions (Nitrate and Sulfide) & Sulfide** The initial calibrations (ICALs) were performed in association with the samples reported in this package. The relationship between instrument response and concentration was established with a blank and at least five standards. The calibrations were verified with the analysis of an initial calibration verification (ICV) standard. All metals were recovered within the method acceptance range of 90-110%. **Total Dissolved Solids (TDS)** ICALs are not required per the method for TDS.

Review Parameter	Criteria Met?	Comment
Tuning (as applicable to the method)	Yes	**Methods 8260B VOCs & 8270C SVOCs** A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis. No errors in calculation of percent relative abundances were found and all were within the required acceptance ranges. Data qualification on the basis of instrument tuning was not necessary. **Method 8270C PAHs** Per the footnote under EPA Method 8270C, Table 3 (Decafluorotriphenylphosphine (DFTTP) Key Ions and Abundance Criteria), alternate tuning criteria may be used, (e.g. Contract Laboratory Program (CLP), Method 525, or manufacturers' instructions), provided that method performance is not adversely affected. For PAHs, the tuning criteria selected were those presented in Method 525, where the base peak is 442 instead of 198. As all tuning criteria were met and the data are not considered to be adversely affected; no further action was considered necessary.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** With the exceptions listed in Table 6, the %Ds for all CCCs in the ICVs and continuing calibrations (CCALs) were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 20%. **Methods 8270C SVOCs, 8270C PAHs, & RSK-175** With the exceptions listed in Table 6, the %D values for all target analytes in the calibration were less than 20%. **Method 6020 (ICPMS Metals)** Calibration verification analyses were conducted at the proper frequency. All metals were recovered within the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2 low level acceptance range of 80-120% and the method medium/high acceptance range of 90-110%. **Method 7470A Mercury** Calibration verification analyses were conducted at the proper frequency. All results were recovered within the DoD QSM version 4.2 acceptance range of 90-110%. A low level calibration verification is not required per DoD QSM version 4.2; therefore, laboratory limits were used. **Anions (Nitrate and Sulfate) & Sulfide** The calibration verification analyses were conducted at the proper frequency. All parameters were recovered within the acceptance range of 90-110%. **TDS** Calibration verifications are not required for TDS.

Review Parameter	Criteria Met?	Comment
Interference Check Standard (Metals Only)	No	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 80-120% in the ICS AB solution. With the exceptions listed in Table 7, interferent elements were not present in the samples at concentrations greater than those in the ICSs. The interferent elements aluminum, calcium, iron, potassium, magnesium, molydenum, sodium, and/or titanium were present in most samples in this data package at concentrations greater than or equal to those in the ICSs. As such, these samples were evaluated for positive and negative biases suggested by the ICS A. Data qualification was issued if the absolute value of the ICS A result was greater than the DL and it suggested a positive or negative bias which accounted for more than 25% of associated sample results or LODs. (Note: The ICS A solution only contains the interferent elements aluminum, calcium, iron, and magnesium so any positive or negative result for other analytes is inferred to be a bias potentially caused by one or more of the interferent elements present). Table 7 summarizes the resultant data qualification on the basis of the ICS results.
Internal Standard (VOCs/PAHs/Metals (6020))	Yes	Recoveries for the internal standards in field samples were within the applicable acceptance limits. Therefore, data qualification based on internal standards was not necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate	No	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. With the exceptions listed in Table 8, all of the LCS recoveries and LCS/LCSD RPDs were within the QAPP acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Target Compound Identification	Yes	**Methods 8260C VOCs, 8270C SVOCs, & 8270C PAHs** The quantitation sheets and total ion chromatograms were reviewed to assure that compounds reported as identified meet the criteria contained in the method. The mass spectra were reviewed for compounds reported as identified to check that the reported mass spectral data meet the mass spectral identification criteria contained in the analytical method. No errors in compound identification were found and data qualification was not necessary. During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference spectra taken from the instrument calibration, the analyst was not seeing the improper alignment of spectra noted in the data package during his/her review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding.

Review Parameter	Criteria Met?	Comment
		Methods RSK-175, 6020 (ICPMS Metals), Anions (Nitrate and Sulfate), & Sulfide The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities agreed with reported concentrations for all samples. No errors in compound identification were found and data qualification was not necessary. **TDS** Instrument results are not available for TDS as the results are obtained from a calculation.
Package Completeness	No	With the exception of the benzoic acid results, which were qualified as unusable due to LCS/LCSD and MS/MSD recoveries <10%, the results are usable as qualified for the project objective. The data are 99% complete.

> - Greater Than
< - Less Than
≤ - Less Than or Equal to
± - Plus or Minus
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCCs – Calibration Check Compounds
CLP – Contract Laboratory Program
COC – Chain of Custody
DFTPP - Decafluorotriphenylphosphine
DLs – Detection Limits
DOD – Department of Defense
HT – Holding Time
I – Indeterminate Bias
ICAL – Initial Calibration
ICPMS - Inductively Coupled Plasma Mass Spectrometry
ICS – Interference Check Standard
ICV – Initial Calibration Verification
GRO – Gasoline Range Organics
J – Estimated
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
LOQ – Limit of Quantitation
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
PAHs – Polynuclear Aromatic Hydrocarbons
QAPP – Quality Assurance Project Plan
QSM – Quality Systems Manual
RSK – Robert S. Kerr
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
SVOCs – Semivolatile Organic Compounds
TDS – Total Dissolved Solids
VOA – Volatile Organic Analysis
VOCs – Volatile Organic Compounds

Table 1: Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
Inorganics			
MB Batch WG828856 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW21-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW18-NT01 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW15-NT01	Sulfate	195 µg/L	None. The associated sulfate results were reported at concentrations >5x the concentration of the blank contamination.

Associated Samples	Analyte	Concentration	Qualification
Total Metals			
MB Batch WG828917 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW21-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW15-NT01 TU904-MW04-NT01 TU904-MW19-NT01	Mercury	0.0888 µg/L	The associated mercury results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB,CCB-I).
CCB WG828917 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW21-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01		0.092 µg/L	
CCB WG828917 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01		0.081 µg/L	
MB Batch WG829002 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW21-NT01 TU904-MW13-NT01	Aluminum	2.36 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Vanadium	0.542 µg/L	

Associated Samples	Analyte	Concentration	Qualification
TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW15-NT01 TU904-MW04-NT01 TU904-MW19-NT01			
CCB WG829002 TU904-MW15-NT01 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW21-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01	Antimony	0.220 µg/L	The associated antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
	Vanadium	0.242 µg/L	None. The associated vanadium results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
CCB WG829002 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW21-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW04-NT01 TU904-MW19-NT01	Antimony	0.231 µg/L	The associated antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
	Vanadium	0.227 µg/L	None. The associated vanadium results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
CCB WG829002 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW04-NT01 TU904-MW19-NT01	Antimony	0.278 µg/L	The associated antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
	Vanadium	0.216 µg/L	None. The associated vanadium results were reported as non-detect or at concentrations >5x the concentration of

Associated Samples	Analyte	Concentration	Qualification
CCB WG829002 TU904-MW15-NT01 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW21-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01	Chromium	1.15 µg/L	the blank contamination.
CCB WG829002 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW04-NT01 TU904-MW19-NT01		1.12 µg/L	The chromium result for sample TU904-MW19-NT01 was reported at a concentration <5x the concentration of the blank contamination and was qualified as non-detect (U CCB-I).
Dissolved Metals			
MB Batch WG828919 TU904-MW17-ND01 TU904-MW20-ND01 TU904-MW21-ND01 TU904-MW13-ND01 TU904-MW08-ND01 TU904-MW08-DD01 TU904-MW01-ND01 TU904-MW07-ND01 TU904-MW11-ND01 TU904-MW06-ND01 TU904-MW16-ND01 TU904-MW18-ND01 TU904-MW03-ND01 TU904-MW02-ND01 TU904-MW14-ND01 TU904-MW10-ND01 TU904-MW15-ND01 TU904-MW04-ND01 TU904-MW19-ND01	Dissolved Mercury	0.0859 µg/L	The associated dissolved mercury results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB,CCB-I).
CCB WG828919 TU904-MW17-ND01 TU904-MW20-ND01 TU904-MW21-ND01 TU904-MW13-ND01 TU904-MW08-ND01 TU904-MW08-DD01 TU904-MW01-ND01 TU904-MW07-ND01 TU904-MW11-ND01 TU904-MW06-ND01		0.053 µg/L	

Associated Samples	Analyte	Concentration	Qualification
CCB WG828919 TU904-MW17-ND01 TU904-MW20-ND01 TU904-MW21-ND01 TU904-MW13-ND01 TU904-MW08-ND01 TU904-MW08-DD01 TU904-MW01-ND01 TU904-MW07-ND01 TU904-MW11-ND01 TU904-MW06-ND01 TU904-MW16-ND01 TU904-MW18-ND01 TU904-MW03-ND01 TU904-MW02-ND01 TU904-MW14-ND01 TU904-MW10-ND01 TU904-MW04-ND01 TU904-MW19-ND01		0.060 µg/L	
MB Batch WG829004 TU904-MW17-ND01 TU904-MW20-ND01 TU904-MW21-ND01 TU904-MW13-ND01 TU904-MW08-ND01 TU904-MW08-DD01 TU904-MW01-ND01 TU904-MW07-ND01 TU904-MW11-ND01 TU904-MW06-ND01 TU904-MW16-ND01 TU904-MW18-ND01 TU904-MW03-ND01 TU904-MW02-ND01 TU904-MW14-ND01 TU904-MW10-ND01 TU904-MW15-ND01 TU904-MW04-ND01 TU904-MW19-ND01	Dissolved Aluminum	2.15 µg/L	None. The associated dissolved aluminum results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Dissolved Antimony	0.907 µg/L	The associated dissolved antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Dissolved Chromium	0.669 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Dissolved Copper	0.527 µg/L	
	Dissolved Nickel	0.355 µg/L	
	Dissolved Vanadium	0.454 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
SVOCs			
MB Batch WG829202 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01	Di-n-octyl Phthalate	0.318 µg/L	The associated di-n-octyl phthalate results reported at concentrations <10x the concentration of the blank contamination were qualified as non-detect (U MB-I).

Associated Samples	Analyte	Concentration	Qualification
TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW15-NT01 TU904-MW04-NT01 TU904-MW19-NT01			
PAHs			
MB Batch WG829610 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW21-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW15-NT01 TU904-MW04-NT01 TU904-MW19-NT01	Benzo(a)anthracene	0.00590 µg/L	The associated benzo(a)anthracene results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).

> - Greater Than
< - Less Than
µg/L – Micrograms per Liter
CCB – Continuing Calibration Blank
I – Indeterminate Bias
MB – Method Blank
PAHs – Polynuclear Aromatic Hydrocarbons
SVOCs – Semivolatile Organic Compounds
U – Non-detect

Table 2: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
SVOCs				
TU904-MW15-NT01	2,4-Dinitrophenol	49.4/30.5 (15-140)	**47.5** (30)	As the RPD was outside of control limits, the associated 2,4-dinitrophenol result for sample TU904-MW15-NT01 was qualified as estimated (UJ D-I).
	4-Nitroaniline	**125**/117 (35-120)	7.04 (30)	As the potential bias was considered to be high, and the associated 4-nitroanailine result was reported as non-detect, data qualification was not considered necessary.
	4-Nitrophenol	25.7/17.6 (10-125)	**37.4** (30)	As the RPD was outside of control limits, the associated 4-nitrophenol result for sample TU904-MW15-NT01 was qualified as estimated (UJ D-I).

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
	Benzoic Acid	**7.79/6.74** (10-125)	14.4 (30)	As the potential bias was considered to be low, and the MS/MSD %Rs were <10%, the associated non-detect benzoic acid results were qualified as unusable (R) .
	Pentachlorophenol	77.7/57.1 (40-115)	**30.7** (30)	As the RPD was outside of control limits, the associated pentachlorophenol result for sample TU904-MW15-NT01 was qualified as estimated (UJ D-I).
Dissolved Metals				
TU904-MW15-ND01	Beryllium	111/**122** (80-120)	9 (30)	As the potential bias was considered to be high, the associated detected dissolved beryllium result for sample TU904-MW15-ND01 was qualified as estimated (J MS-H).
PAHs				
TU904-MW15-NT01	Acenaphthylene	**106**/102 (50-105)	3.76 (20)	As the potential bias was considered to be high, and the associated acenaphthylene result was reported as non-detect, data qualification was not considered necessary.

%R – Percent Recoveries
% - Percent
< - Less Than
D – Duplicate
H – High Bias
I – Indeterminate Bias
MS/MSD – Matrix Spike Matrix Spike Duplicate
PAHs – Polynuclear Aromatic Hydrocarbons
R – Unusable
RPD – Relative Percent Difference
SVOCs – Semivolatile Organic Compounds
UJ/J – Estimated
Bold indicates a recovery or RPD outside of acceptance limit

Table 3: Total vs. Partial Outliners and Resultant Data Qualification

Sample	Analyte	Total Result (µg/L)	Dissolved Result (µg/L)	Criteria not Met	Qualification
TU904-MW08-NT01/ TU904-MW08-ND01	Nickel	35.4	118	Absolute Difference >2x LOQ	As the absolute difference between the total and dissolved results exceeded 2x the LOQ, results were qualified as estimated (J TvP-I).
TU904-MW01-NT01/ TU904-MW01-ND01	Cobalt	37.7	112		
	Iron	20,800	44,100		
	Manganese	685	1570	RPD >30%	As the RPD between the total and dissolved results exceeded 30%, results were qualified as estimated (J TvP-I).
	Nickel	1680	5730		
TU904-MW03-NT01/ TU904-MW03-ND01	Nickel	698	986		

µg/L – Micrograms per Liter
> - Greater Than
% - Percent
I – Indeterminate Bias
J – Estimated
LOQ – Limit of Quantitation
RPD – Relative Percent Difference
TvP – Total versus Partial

Table 4: Serial Dilution Outliers and Resultant Data Qualification

Associated Sample	Analyte	Parent Sample Result (µg/L)	Serial Dilution Result (µg/L)	%D (Limits)	Qualification
Total Metals					
TU904-MW15-NT01	Aluminum	3909.3	4643.4	**19** (10)	The associated results for sample TU904-MW15-NT01 were qualified as estimated (J DL-L). The bias is considered to be low as the native sample concentration is less than the diluted result.
	Barium	275.73	314.45	**14** (10)	
	Iron	5391.6	6728.3	**25** (10)	
	Manganese	244.44	296.38	**21** (10)	

µg/L – Micrograms per Liter
%D – Percent Difference
DL – Serial Dilution
J – Estimated
L – Low Bias
Bold indicates a recovery or RPD outside of acceptance limits

Table 5: Field Duplicate Outliners and Resultant Data Qualification

Field Duplicate Pair	Analyte	Parent Result (µg/L)	FD Result (µg/L)	Criteria not Met	Qualification
Total Metals					
TU904-MW08-NT01/ TU904-MW08-DT01	Chromium	31.7	379	RPD >30%	As the RPD between the field duplicate pair results exceeded 30%, results were qualified as estimated (J FD-I).
	Copper	2.97	15.2	Absolute Difference >2x LOQ	As the absolute difference between the field duplicate pair results exceeded 2x the LOQ, results were qualified as estimated (J FD-I).
	Cobalt	1.11	13.2		
	Iron	695	6620		
	Manganese	25.5	183	RPD >30%	As the RPD between the field duplicate pair results exceeded 30%, results were qualified as estimated (J FD-I).
	Nickel	35.4	733		

µg/L – Micrograms per Liter
% - Percent
> - Greater Than
FD – Field Duplicate
I – Indeterminate Bias
J – Estimated
LOQ – Limit of Quantitation
RPD – Relative Percent Difference

Table 6: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
VOCs			
TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW21-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01	2-Butanone	-23.4 (±20)	As the potential bias was considered to be low, the associated results were qualified as estimated (UJ CCAL-L).

Associated Samples	Analyte	%D (Limit)	Data Qualification
TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW15-NT01 TU904-MW04-NT01 TU904-MW19-NT01			
SVOCs			
TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW13-NT01 TU904-MW08-DT01	n-Nitrosodimethylamine	+79.4 (±20)	As the potential bias was considered to be high, and the associated samples were reported as non-detect, data qualification was not considered necessary.
	Bis(2-chloroethyl)ether	+72 (±20)	
TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW15-NT01 TU904-MW04-NT01 TU904-MW19-NT01	3&4-Methyl Phenol	-41.3 (±20)	As the potential bias was considered to be low, the associated 3&4-methyl phenol results were qualified as estimated (UJ CCAL-L).
TU904-MW21-NT01		-50.9 (±20)	

± - Plus or minus
L – Low Bias
VOCs – Volatile Organic Compounds
%D – Percent Difference
SVOCs – Semivolatile Organic Compounds
CCAL – Continuing Calibration
UJ – Estimated

Table 7: ICS Outliers and Resultant Data Qualification

Interferent Element	Analyte	ICS A (µg/L)	DL (µg/L)	Qualified Samples	Qualification
Calcium, Magnesium, Sodium	Total Cadmium	0.20	0.16	TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW01-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW14-NT01 TU904-MW15-NT01	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).

µg/L – Micrograms per Liter
ICS – Interference Check Standard
DL – Detection Limit
J - Estimated
H – High Bias

Table 8: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
		SVOCs		
LCS WG829202 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW15-NT01 TU904-MW04-NT01 TU904-MW19-NT01	2,4,6-Trichlorophenol	**48.2**/58.2 (50-115)	18.8 (30)	As the potential bias was considered to be low, the associated 2,4,6-trichlorophenol results were qualified as estimated (UJ LCS-L).
	2,4-Dinitrophenol	18.4/45.7 (15-140)	**85** (30)	As the RPD was outside control limits, the associated 4,6-dinitro-2-methylphenol results were qualified as estimated (UJ LCS-I).
	4,6-Dinitro-2-methylphenol	47.3/66.1 (40-130)	**33.2** (30)	
	4-Nitroaniline	103/**121** (35-120)	16.3 (30)	As the potential bias was considered to be high, and the associated 4-nitroanailine results were reported as non-detect, data qualification was not considered necessary.
	Benzoic Acid	10.1/**7.89** (10-125)	24.6 (30)	As the potential bias was considered to be low, and the LCS/LCSD %Rs were <10%, the associated non-detect benzoic acid results were qualified as unusable (R).
	Dibenzofuran	**54.3**/59.9 (55-105)	9.8 (30)	As the potential bias was considered to be low, the associated dibenzofuran results were qualified as estimated (UJ LCS-L).
	Hexachlorobenzene	**49.9**/70 (50-110)	**33.6** (30)	As the potential bias was considered to be low, and the RPD was outside of control limits, the associated results were qualified as estimated (UJ LCS-L).
	Pentachlorophenol	**37.7**/73.4 (40-115)	**64.4** (30)	

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
LCS WG829724 TU904-MW21-NT01	Benzoic Acid	**5.25/6.08** (10-125)	14.7 (30)	As the potential bias was considered to be low, and the LCS/LCSD %Rs were <10%, the associated non-detect benzoic acid result was qualified as unusable (R).
PAHs				
LCS WG829610 TU904-MW17-NT01 TU904-MW20-NT01 TU904-MW21-NT01 TU904-MW13-NT01 TU904-MW08-DT01 TU904-MW08-NT01 TU904-MW01-NT01 TU904-MW07-NT01 TU904-MW11-NT01 TU904-MW06-NT01 TU904-MW16-NT01 TU904-MW18-NT01 TU904-MW03-NT01 TU904-MW02-NT01 TU904-MW14-NT01 TU904-MW10-NT01 TU904-MW15-NT01 TU904-MW04-NT01 TU904-MW19-NT01	Benzo(a)pyrene	105/**111** (55-110)	5.38 (20)	As the potential bias was considered to be high, and the associated chrysene results were reported as non-detect, data qualification was not considered necessary.

% - Percent
%R – Percent Recoveries
< - Less Than
I – Indeterminate Bias
L – Low Bias
LCS – Laboratory Control Sample
PAHs – Polynuclear Aromatic Hydrocarbons
R – Unusable
RPD – Relative Percent Difference
SVOCs – Semivolatile Organic Compounds
UJ - Estimated
Bold indicates a recovery outside of acceptance limits.

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-01

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW17-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-1	7429-90-5	37.1	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	3.16	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-1	7440-39-3	28.3	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved F SQL-1	7439-96-5	5.00	2.5	5.00	50	ug/l	J	6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved J MS-H	7782-49-2	21.2	3.8	10.0	20	ug/l		6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	5.71	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved UMB, CCB-I	7439-97-6	0.0878	~~0.049~~ 0.0878	~~0.0800~~ 0.0878	0.2	ug/l	J	7470A	11/16/15	1

U = Not Detected at the LOD
Note:
The reported analytical results relate only to the sample submitted.
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Reported: 11/20/15 12:08 Revised: 02/02/16 21:00

CA 1/25/16

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-02

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW17-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate J HT-I	14797-55-8	61500	2270	5000	10000	ug/l	T8	9056MOD	11/13/15	100
Sulfate	14808-79-8	5180000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	11900000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	3580	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	1.04	~~0.21~~ 1.04	~~0.500~~ 1.04	2	ug/l	J	6020	11/17/15	1
Arsenic F SQL-1	7440-38-2	5.08	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	126.	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F SQL-1	7440-41-7	0.624	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium FJ SQL, ICS-H	7440-43-9	0.348	0.16	0.500	1	ug/l	J	6020	11/17/15	1
Chromium	7440-47-3	10.0	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	5.83	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	3.93	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron	7439-89-6	4240	15	500.	1000	ug/l		6020	11/17/15	1
Lead F SQL-1	7439-92-1	10.2	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	216.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	7.36	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F SQL-1	7782-49-2	18.7	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver F SQL-1	7440-22-4	0.533	0.31	0.500	2	ug/l	J	6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	18.1	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	33.0	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	~~0.0737~~ 0.0800	~~0.049~~ 0.0737	0.0800	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-02

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW17-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CC ALL	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	6.86	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-02

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW17-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	104.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	99.7				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	102.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.0250	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00608~~	~~0.0041~~ 0.00608	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	112.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	111.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	89.4				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran US LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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February 02, 2016

ESC Sample # : L800773-02

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Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DMR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate FSAL-1	117-81-7	0.709	0.709	1.00	3	ug/l	J	8270C	11/18/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/18/15	1
1,2,4-Trichlorobenzene DMR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, I D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CC AL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	37.4				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	30.5				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	45.5				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	45.6				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	61.0				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	73.5				% Rec.		8270C	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-03

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW20-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate J HT-I	14797-55-8	8600	1135	2500	5000	ug/l	P1T8	9056MOD	11/14/15	50
Sulfate	14808-79-8	3890000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	6030000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	3160	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	0.552	~~0.21~~ 0.552	~~0.500~~ 0.552	2	ug/l	J	6020	11/17/15	1
Arsenic F sal-1	7440-38-2	3.40	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	149.	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F sal-1	7440-41-7	0.537	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium FJ sal, ICS-H	7440-43-9	0.300	0.16	0.500	1	ug/l	J	6020	11/17/15	1
Chromium	7440-47-3	10.7	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	6.17	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	4.15	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron	7439-89-6	4060	15	500.	1000	ug/l		6020	11/17/15	1
Lead F sal-1	7439-92-1	8.21	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	179.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	6.79	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F sal-1	7782-49-2	4.82	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	14.4	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	33.2	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.102	~~0.049~~ 0.102	~~0.0800~~ 0.102	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	1.51	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
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8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-03

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW20-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform ~~F SQL-1~~ U FB-I	67-66-3	2.50	~~0.324~~ 2.50	2.50	5	ug/l	J	8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	1.28	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	4.65	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene F SQL-1	79-01-6	0.903	0.398	0.500	1	ug/l	J	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-03

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW20-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	108.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	102.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	104.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00626~~ 0.025	~~0.0041~~ 0.00626	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	102.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	106.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	91.8				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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February 02, 2016

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Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	1
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.322~~ 1.0	~~0.278~~ 0.322	1.00	3	ug/l	J	8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, ~~Z~~ D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	30.9				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	28.1				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	43.1				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	48.1				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	48.2				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	72.7				% Rec.		8270C	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-04

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW20-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-1	7429-90-5	43.4	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/18/15	10
Barium,Dissolved F SQL-1	7440-39-3	35.7	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved F SQL-1	7439-96-5	14.9	2.5	5.00	50	ug/l	J	6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	5.52	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	5.95	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.106	~~0.049~~ 0.106	~~0.0800~~ 0.106	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-05

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW21-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F sal-I	7429-90-5	28.3	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/18/15	10
Barium,Dissolved F sal-I	7440-39-3	27.6	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	22.8	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved F sal-I	7439-96-5	3.78	2.5	5.00	50	ug/l	J	6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	7.67	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	6.99	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.111	~~0.049~~ 0.111	~~0.0800~~ 0.111	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-06

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW21-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate JHT-I	14797-55-8	9420	454	1000	2000	ug/l	T8	9056MOD	11/14/15	20
Sulfate	14808-79-8	4890000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	7190000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	1250	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.364~~ 0.500	~~0.21~~ 0.364	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/18/15	10
Barium	7440-39-3	58.3	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F Sal-I	7440-41-7	0.188	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	14.8	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper F Sal-I	7440-50-8	2.38	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt F Sal-I	7440-48-4	1.52	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Iron	7439-89-6	1210	15	500.	1000	ug/l		6020	11/17/15	1
Lead F Sal-I	7439-92-1	3.35	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	61.2	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	3.38	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F Sal-I	7782-49-2	6.89	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	9.21	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc F Sal-I	7440-66-6	21.7	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.117	~~0.049~~ 0.117	~~0.0800~~ 0.117	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-06

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW21-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform FSQL-I U PB-I	67-66-3	~~0.404~~ 2.50	~~0.324~~ 0.404	2.50	5	ug/l	J	8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene FSQL-I	79-01-6	0.786	0.398	0.500	1	ug/l	J	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
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Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-06

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW21-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	107.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	101.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	99.8				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.025	0.012 0.00539	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00539~~	~~0.0041~~	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	103.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	103.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	86.7				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1

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KAI 2/25/16

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-06

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW21-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate FSQL-I	84-74-2	0.566	0.266	1.00	3	ug/l	J	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol ~~UJ D-I~~	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ D-I	51-28-5	U	3.25	5.00	10	ug/l		8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	53.2				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	33.8				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	73.6				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	85.1				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	73.0				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	84.1				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-07

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW13-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate J HT-I	14797-55-8	25700	2270	5000	10000	ug/l	T8	9056MOD	11/13/15	100
Sulfate	14808-79-8	3900000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	8920000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	4450	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.356~~ 0.500	~~0.21~~ 0.356	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F Sal-1	7440-38-2	5.49	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	167.	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F Sal-1	7440-41-7	0.732	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium F Sal-1	7440-43-9	0.316	0.16	0.500	1	ug/l	J	6020	11/17/15	1
Chromium	7440-47-3	10.7	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	7.10	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	4.89	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron	7439-89-6	5230	15	500.	1000	ug/l		6020	11/17/15	1
Lead F Sal-1	7439-92-1	11.3	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	264.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	8.21	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F Sal-1	7782-49-2	15.7	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	22.4	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	32.2	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB + ~~I~~ CCB-I	7439-97-6	0.0993	~~0.049~~ 0.0993	~~0.0800~~ 0.0993	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane F Sal-1	75-27-4	0.898	0.38	0.500	1	ug/l	J	8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

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February 02, 2016

ESC Sample # : L800773-07

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW13-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform FSQL-I U FB-I	67-66-3	~~1.58~~ 2.50	~~0.324~~ 1.58	2.50	5	ug/l	J	8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane FSQL-I	75-34-3	0.399	0.259	0.500	1	ug/l	J	8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	1.13	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) US CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
~~Naphthalene~~ DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	16.1	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-07

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW13-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	104.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	100.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	101.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.0025	0.012 0.00485	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene UMB-1	56-55-3	~~0.00485~~	~~0.0041~~	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	104.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	102.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	94.0				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW13-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 11:40

ESC Sample # : L800773-07

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.320~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.307~~ 1.0	~~0.278~~ 0.307	1.00	3	ug/l	J	8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS+ ICD-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	29.9				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	24.5				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	34.0				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	35.1				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	38.2				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	72.1				% Rec.		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-08

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW13-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 11:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	88.5	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved U MB-I	7440-36-0	~~4.45~~ 5.0	~~2.1~~ 4.45	5.00	20	ug/l	J	6020	11/18/15	10
Arsenic,Dissolved	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	25.5	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved F SQL-I	7439-96-5	6.93	2.5	5.00	50	ug/l	J	6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-I	7782-49-2	15.4	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-I H	7440-62-2	8.99	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.101	~~0.049~~ 0.101	~~0.0800~~ 0.101	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-09

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW08-DT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate J HT-I	14797-55-8	20300	2270	5000	10000	ug/l	T8	9056MOD	11/13/15	100
Sulfate	14808-79-8	3280000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	9360000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	532	~~2~~ 0.500	~~2~~ 0.270	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.270~~	~~0.21~~	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F SQL-I	7440-38-2	2.94	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	22.6	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium J FD-I	7440-47-3	379.	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper J FD-I	7440-50-8	15.2	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt J FD-I	7440-48-4	13.2	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron J FD-I	7439-89-6	6620	15	500.	1000	ug/l		6020	11/17/15	1
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese J FD-I	7439-96-5	183.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel J FD-I	7440-02-0	733.	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F SQL-I	7782-49-2	12.1	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	15.6	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc F SQL-I	7440-66-6	8.52	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.109	~~0.049~~ 0.109	~~0.0800~~ 0.109	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-09

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW08-DT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	1.10	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-09

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW08-DT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	101.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	105.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	105.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.025	0.012 ~~0.00556~~	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00556~~	~~0.0041~~	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	96.4				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	98.2				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	82.1				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-09

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW08-DT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, ~~I~~ D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	40.7				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	33.2				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	46.4				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	50.0				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	62.2				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	78.4				% Rec.		8270C	11/18/15	1

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February 02, 2016

ESC Sample # : L800773-10

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW08-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-1	7429-90-5	30.9	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved U MB-I	7440-36-0	~~2.61~~ 5.0	~~2.1~~ 2.61	5.00	20	ug/l	J	6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	4.00	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	14.6	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved F SQL-1	7439-89-6	582.	150	5000	10000	ug/l	J	6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved F SQL-I	7439-96-5	34.0	2.5	5.00	50	ug/l	J	6020	11/18/15	10
Nickel,Dissolved J IVP-I	7440-02-0	118.	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	16.0	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	15.2	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	~~0.0775~~ 0.0800	~~0.049~~ 0.0775	0.0800	0.2	ug/l	J	7470A	11/16/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-11

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW08-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate J HT-I	14797-55-8	23200	2270	5000	10000	ug/l	T8	9056MOD	11/13/15	100
Sulfate	14808-79-8	3600000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	9200000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	540.	2	50.0	100	ug/l		6020	11/17/15	1
Antimony	7440-36-0	U	0.21	0.500	2	ug/l		6020	11/17/15	1
Arsenic F SQL-I	7440-38-2	3.59	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	19.6	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium J FD-I	7440-47-3	31.7	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper FJ SQL, FD-I	7440-50-8	2.97	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt FJ SQL, FD-I	7440-48-4	1.11	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Iron FJ SQL, FD-I	7439-89-6	695.	15	500.	1000	ug/l	J	6020	11/17/15	1
Lead F SQL-I	7439-92-1	2.43	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese J FD-I	7439-96-5	25.5	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel J TYP FD-I	7440-02-0	35.4	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F SQL-I	7782-49-2	12.2	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	14.1	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc F SQL-I	7440-66-6	8.95	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.0995	~~0.049~~ 0.0995	~~0.0800~~ 0.0995	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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Dale Flores and Arielle Bisoglio
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8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-11

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW08-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	1.68	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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DNR = Do Not Report

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February 02, 2016

ESC Sample # : L800773-11

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW08-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	107.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	98.5				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.025	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00494~~	~~0.0041~~ 0.00469	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	98.0				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	99.2				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	88.1				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran US LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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Date Received : November 13, 2015
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ESC Sample # : L800773-11

Site ID :

Sample ID : TU904-MW08-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene UJ LCS-L	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate FSal-1	84-74-2	0.347	0.266	1.00	3	ug/l	J	8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS+ D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	46.9				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	35.0				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	51.4				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	54.1				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	55.4				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	76.9				% Rec.		8270C	11/18/15	1

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DNR = Do NOT REPORT

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-12

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW08-DD01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	39.6	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved U MB-I	7440-36-0	~~2.25~~ 5.0	~~2.1~~ 2.25	5.00	20	ug/l	J	6020	11/18/15	10
Arsenic,Dissolved F J SQL, MS-H	7440-38-2	3.53	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	15.3	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved F SQL-I	7439-89-6	332.	150	5000	10000	ug/l	J	6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved F SQL-I	7439-96-5	20.8	2.5	5.00	50	ug/l	J	6020	11/18/15	10
Nickel,Dissolved	7440-02-0	66.1	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	15.0	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	14.5	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.121	~~0.049~~ 0.121	~~0.0800~~ 0.121	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-13

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW01-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	50.1	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	18.6	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved F SQL-I	7440-47-3	6.08	5.4	15.0	20	ug/l	J	6020	11/18/15	10
Copper,Dissolved J MS-H	7440-50-8	75.8	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved J TvP-I	7440-48-4	112.	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved J TvP-I	7439-89-6	44100	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved J TvP-I	7439-96-5	1570	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved J TvP-I	7440-02-0	5730	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved ~~FJ~~ SQL, MS-H	7782-49-2	14.6	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved ~~FJ~~	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved	7440-62-2	U	1.8	5.00	50	ug/l		6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.118	~~0.049~~ 0.118	~~0.0800~~ 0.118	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW01-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 12:40

ESC Sample # : L800773-14

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate J HT-I	14797-55-8	25000	2270	5000	10000	ug/l	T8	9056MOD	11/13/15	100
Sulfate	14808-79-8	3440000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	9100000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	3980	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.499~~ 0.500	~~0.21~~ 0.499	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F Sal-I	7440-38-2	12.8	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	164.	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F Sal-I	7440-41-7	0.708	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium FJ SQL, ICS-H	7440-43-9	0.399	0.16	0.500	1	ug/l	J	6020	11/17/15	1
Chromium	7440-47-3	57.8	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	31.4	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt J TvP-I	7440-48-4	37.7	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron J TvP-I	7439-89-6	20800	15	500.	1000	ug/l		6020	11/17/15	1
Lead F Sal-I	7439-92-1	14.9	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese J TvP-I	7439-96-5	685.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel J TvP-I	7440-02-0	1680	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F Sal-I	7782-49-2	13.1	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver F Sal-I	7440-22-4	0.608	0.31	0.500	2	ug/l	J	6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	55.9	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	44.2	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.105	~~0.049~~ 0.105	~~0.080~~ 0.105	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-14

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW01-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	3.87	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW01-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 12:40

ESC Sample # : L800773-14

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	98.9				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	107.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.025	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00550~~	~~0.0041~~ 0.0055	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	101.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	97.4				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	87.2				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-14

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW01-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 12:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate F JQL-1	84-74-2	0.679	0.266	1.00	3	ug/l	J	8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U 1.0	0.283 0.303	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I	117-84-0	0.303	~~0.278~~	1.00	3	ug/l	J	8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	42.0				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	29.8				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	46.4				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	53.1				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	71.5				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	74.4				% Rec.		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-15

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW07-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 16:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate	14797-55-8	39600	2270	5000	10000	ug/l		9056MOD	11/13/15	100
Sulfate	14808-79-8	3380000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	9640000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	2670	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	0.502	~~0.21~~ 0.502	~~0.500~~ 0.502	2	ug/l	J	6020	11/17/15	1
Arsenic F Sdl-1	7440-38-2	11.5	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	95.5	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F-Sdl-1	7440-41-7	0.440	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	119.	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	8.33	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	4.36	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron	7439-89-6	6440	15	500.	1000	ug/l		6020	11/17/15	1
Lead F Sdl-1	7439-92-1	11.9	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	148.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	51.7	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F Sdl-1	7782-49-2	14.6	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	50.4	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	32.2	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.120	~~0.049~~ 0.120	~~0.0800~~ 0.120	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
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Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-15

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW07-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 16:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) WJ CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DML	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	4.86	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-15

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW07-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 16:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	102.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.025	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	0.00526	~~0.0041~~ 0.00526	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	104.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	99.4				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	87.9				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-15

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW07-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 16:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate FSAL-1	84-74-2	0.310	0.266	1.00	3	ug/l	J	8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	38.7				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	25.4				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	40.7				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	50.4				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	66.3				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	77.1				% Rec.		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-16

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW07-ND01

Collected By : Katie Abbott
Collection Date : 11/11/15 16:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F sal-1	7429-90-5	588.	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	4.54	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F sal-1	7440-39-3	21.0	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved F sal-1	7440-47-3	14.0	5.4	15.0	20	ug/l	J	6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved F sal-1	7439-89-6	840.	150	5000	10000	ug/l	J	6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved F sal-1	7439-96-5	30.8	2.5	5.00	50	ug/l	J	6020	11/18/15	10
Nickel,Dissolved	7440-02-0	44.7	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL,MS-H	7782-49-2	17.1	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL,MS-H	7440-62-2	14.7	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.0953	~~0.049~~ 0.0953	~~0.0800~~ 0.0953	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-17

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW11-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 15:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	31.4	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	4.93	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	20.0	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved F SQL-I	7440-47-3	5.74	5.4	15.0	20	ug/l	J	6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	27.6	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved J MS-H	7782-49-2	20.8	3.8	10.0	20	ug/l		6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	14.0	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.0930	~~0.049~~ 0.0930	~~0.0800~~ 0.0930	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-18

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW11-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 15:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate	14797-55-8	34400	2270	5000	10000	ug/l		9056MOD	11/13/15	100
Sulfate	14808-79-8	3370000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	8700000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	762	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.404~~ 0.500	~~0.21~~ 0.404	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F sal-1	7440-38-2	3.11	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	31.6	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	58.0	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper F sal-1	7440-50-8	3.74	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt F sal-1	7440-48-4	1.36	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Iron	7439-89-6	1260	15	500.	1000	ug/l		6020	11/17/15	1
Lead F sal-1	7439-92-1	3.14	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	36.3	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	27.6	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F sal-1	7782-49-2	14.8	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	14.6	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc F sal-1	7440-66-6	18.1	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.0987	~~0.049~~ 0.0987	~~0.0800~~ 0.0987	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-18

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Description : Holloman AFB

Site ID :

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Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	1.80	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	107.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	99.9				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.025	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00585~~	~~0.0041~~ 0.00585	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	106.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	103.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	95.3				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
~~Hexachloro-1,3-butadiene~~ D MC	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate ~~U MB-I~~	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U 1.0	0.283 0.438	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.438~~	~~0.278~~	1.00	3	ug/l	J	8270C	11/18/15	1
~~1,2,4-Trichlorobenzene~~ DMC	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CC AL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	49.2				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	36.2				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	58.0				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	61.4				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	84.3				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	90.9				% Rec.		8270C	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-19

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW06-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/12/15 10:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	39.1	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	3.73	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	12.2	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved F SQL-I	7439-96-5	14.1	2.5	5.00	50	ug/l	J	6020	11/18/15	10
Nickel,Dissolved	7440-02-0	70.0	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	14.4	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	12.4	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved UMB, CCB-I	7439-97-6	0.119	~~0.049~~ 0.119	~~0.0800~~ 0.119	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-20

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW06-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/12/15 10:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate	14797-55-8	32000	2270	5000	10000	ug/l		9056MOD	11/13/15	100
Sulfate	14808-79-8	3910000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	8780000	2820	5000	10000	ug/l		2540 C-	11/19/15	1
Aluminum	7429-90-5	1260	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.256~~	~~0.21~~ 0.256	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F sal-1	7440-38-2	4.05	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	46.9	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F sal-1	7440-41-7	0.124	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	80.6	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	6.13	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	2.45	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron	7439-89-6	1850	15	500.	1000	ug/l		6020	11/17/15	1
Lead F sal-1	7439-92-1	3.13	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	46.8	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	84.1	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F sal-1	7782-49-2	13.2	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	14.5	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc F sal-1	7440-66-6	12.4	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.0972	~~0.049~~ 0.0972	~~0.0800~~ 0.0972	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-20

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW06-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/12/15 10:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) US CC ALL	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene F SQL-1	79-01-6	0.487	0.398	0.500	1	ug/l	J	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-20

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW06-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/12/15 10:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	111.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	101.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	103.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.025	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00523~~	~~0.0041~~ 0.00523	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	103.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	98.0				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	92.0				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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Note:
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-20

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW06-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 10:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate FSQL-I	117-81-7	0.725	0.709	1.00	3	ug/l	J	8270C	11/18/15	1
Di-n-butyl phthalate FSQL-I	84-74-2	0.286	0.266	1.00	3	ug/l	J	8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U 1.00	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.325~~	~~0.278~~ 0.325	1.00	3	ug/l	J	8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS + D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	36.7				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	31.2				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	42.2				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	44.1				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	65.7				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	76.8				% Rec.		8270C	11/18/15	1

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DNR = DO NOT REPORT

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-21

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW16-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 14:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved FSQL-I	7429-90-5	75.3	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	4.21	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved FSQL-I	7440-39-3	18.4	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	15.2	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	13.7	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB,CCB-I	7439-97-6	0.0937	~~0.049~~ 0.0937	~~0.0800~~ 0.0937	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-22

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW16-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 14:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate	14797-55-8	37000	454	1000	2000	ug/l		9056MOD	11/13/15	20
Sulfate	14808-79-8	3050000	7740	50000	500000	ug/l		9056MOD	11/18/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	9760000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	5620	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	0.540	~~0.21~~ 0.540	~~0.500~~ 0.540	2	ug/l	J	6020	11/17/15	1
Arsenic F SQL-1	7440-38-2	6.07	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	142.	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F SQL-1	7440-41-7	0.749	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium FJ SQL, ICS-H	7440-43-9	0.204	0.16	0.500	1	ug/l	J	6020	11/17/15	1
Chromium	7440-47-3	12.9	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	7.24	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	4.22	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron	7439-89-6	7170	15	500.	1000	ug/l		6020	11/17/15	1
Lead F SQL-1	7439-92-1	9.57	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	200.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	9.79	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F SQL-1	7782-49-2	16.5	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	36.0	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	35.2	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB CCB-I	7439-97-6	0.127	~~0.049~~ 0.127	~~0.0800~~ 0.127	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-22

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW16-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 14:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	2.49	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

U = Not Detected at the LOD
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-22

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW16-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 14:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	99.2				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	98.9				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.025	0.014 0.0052	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00522~~	~~0.0041~~	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	105.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	103.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	93.3				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran ~~UJ LCS-L~~ UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-22

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW16-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 14:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U 1.00	0.283 0.302	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U DNR MB-I	117-84-0	~~0.302~~	~~0.278~~	1.00	3	ug/l	J	8270C	11/18/15	1
1,2,4-Trichlorobenzene	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	35.0				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	26.8				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	44.5				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	47.0				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	48.2				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	63.1				% Rec.		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-23

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW18-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 16:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved FSQL-I	7429-90-5	36.8	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved UMB-I	7440-36-0	~~3.20~~ 5.0	~~2.1~~ 3.20	5.00	20	ug/l	J	6020	11/18/15	10
Arsenic,Dissolved	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/18/15	10
Barium,Dissolved FSQL-I	7440-39-3	24.7	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	10.7	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	5.03	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved UMB, CCB-I	7439-97-6	0.112	~~0.049~~ 0.112	~~0.0800~~ 0.112	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW18-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 16:30

ESC Sample # : L800773-24

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate	14797-55-8	17500	2270	5000	10000	ug/l		9056MOD	11/13/15	100
Sulfate	14808-79-8	4110000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	7520000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	3590	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.455~~ 0.50	~~0.21~~ 0.455	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F SQL-1	7440-38-2	2.82	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	130.	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F SQL-1	7440-41-7	0.461	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium F SQL, ICS-H	7440-43-9	0.164	0.16	0.500	1	ug/l	J	6020	11/17/15	1
Chromium	7440-47-3	11.7	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper F SQL-1	7440-50-8	4.98	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt	7440-48-4	3.03	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron	7439-89-6	5200	15	500.	1000	ug/l		6020	11/17/15	1
Lead F SQL-1	7439-92-1	7.26	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	134.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	5.48	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F SQL-1	7782-49-2	7.33	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	12.5	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	115.	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.114	~~0.049~~ 0.114	~~0.0800~~ 0.114	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane F SQL-1	75-27-4	0.719	0.38	0.500	1	ug/l	J	8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-24

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW18-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 16:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform ~~FSal-I~~ UFB-I	67-66-3	~~1.54~~ 2.50	~~0.324~~ 1.54	2.50	5	ug/l	J	8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane FSal-I	75-34-3	0.313	0.259	0.500	1	ug/l	J	8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene FSal-I	75-35-4	0.964	0.398	0.500	1	ug/l	J	8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) US CCAL	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
~~Naphthalene DNR~~	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	7.08	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW18-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 16:30

ESC Sample # : L800773-24

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	104.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	102.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	104.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00553~~ 0.025	~~0.0041~~ 0.00553	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	97.3				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	97.6				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	85.9				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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February 02, 2016

ESC Sample # : L800773-24

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW18-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 16:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.342~~ 1.00	~~0.278~~ 0.342	1.00	3	ug/l	J	8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CC AL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	37.4				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	30.0				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	46.1				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	50.4				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	72.2				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	80.5				% Rec.		8270C	11/18/15	1

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February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW03-ND01

Collected By : Katie Abbott
Collection Date : 11/11/15 13:40

ESC Sample # : L800773-25

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	28.4	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved U MB-I	7440-36-0	~~2.47~~ 5.0	~~2.1~~ 2.47	5.00	20	ug/l	J	6020	11/18/15	10
Arsenic,Dissolved FJ SQL,MS-H	7440-38-2	3.48	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	14.6	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved FJ SQL,MS-H	7440-50-8	5.72	5.2	15.0	50	ug/l	J	6020	11/18/15	10
Cobalt,Dissolved F SQL-I	7440-48-4	12.3	2.6	5.00	20	ug/l	J	6020	11/18/15	10
Iron,Dissolved F SQL-I	7439-89-6	400.	150	5000	10000	ug/l	J	6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	159.	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved J TvP-I	7440-02-0	986.	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	16.1	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL,MS-H	7440-62-2	8.06	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.0981	~~0.049~~ 0.0981	0.0800 0.0981	0.2	ug/l	J	7470A	11/16/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-26

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW03-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 13:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate	14797-55-8	36600	454	1000	2000	ug/l	Q	9056MOD	11/13/15	20
Sulfate	14808-79-8	4550000	7740	50000	500000	ug/l		9056MOD	11/18/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	11300000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	1440	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.352~~ 0.500	~~0.21~~ 0.352	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F SQL-I	7440-38-2	6.43	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	40.9	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F SQL-I	7440-41-7	0.161	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	215.	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	9.57	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	8.88	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron	7439-89-6	3350	15	500.	1000	ug/l		6020	11/17/15	1
Lead F SQL-I	7439-92-1	3.38	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	127.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel J TYP-I	7440-02-0	698.	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F SQL-I	7782-49-2	13.0	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	23.0	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc F SQL-I	7440-66-6	13.2	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.0938	~~0.049~~ 0.0938	~~0.0800~~ 0.0938	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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February 02, 2016

ESC Sample # : L800773-26

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 13:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform ~~FSAL-I~~ U FB-I	67-66-3	~~0.364~~ 2.50	~~0.324~~ 0.864	2.50	5	ug/l	J	8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	4.01	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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Sample ID : TU904-MW03-NT01

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Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	104.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	98.9				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	108.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.0250	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene V MB-I	56-55-3	~~0.00560~~	~~0.0041~~ 0.00560	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	101.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	99.9				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	97.0				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.398~~ 1.00	~~0.278~~ 0.398	1.00	3	ug/l	J	8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	40.0				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	29.1				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	35.9				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	45.1				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	45.8				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	76.7				% Rec.		8270C	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-27

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW02-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 14:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-1	7429-90-5	76.1	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	4.56	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-1	7440-39-3	17.0	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved F SQL-1	7440-02-0	11.3	3.5	10.0	20	ug/l	J	6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	15.1	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	13.1	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved F SQL-1	7440-66-6	77.4	25.6	50.0	250	ug/l	J	6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.0945	~~0.049~~ 0.0945	~~0.0800~~ 0.0945	0.2	ug/l	J	7470A	11/16/15	1

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URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 14:30

ESC Sample # : L800773-28

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate	14797-55-8	27600	2270	5000	10000	ug/l	Q	9056MOD	11/13/15	100
Sulfate	14808-79-8	3280000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	10800000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	1970	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.320~~ 0.500	~~0.21~~ 0.320	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F SQL-1	7440-38-2	6.16	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	61.3	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F SQL-1	7440-41-7	0.221	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	35.8	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper F SQL-1	7440-50-8	4.13	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt	7440-48-4	2.16	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron	7439-89-6	3360	15	500.	1000	ug/l		6020	11/17/15	1
Lead F SQL-1	7439-92-1	5.18	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	118.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	21.5	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F SQL-1	7782-49-2	14.0	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	24.8	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	284.	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.0823	~~0.049~~ 0.0823	~~0.0800~~ 0.0823	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 14:30

ESC Sample # : L800773-28

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) WT CCALL	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene UNL	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	4.18	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	101.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	99.1				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.025	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00564~~	~~0.0041~~ 0.00540	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	100.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	97.8				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	91.2				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-28

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 14:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate FS dl-1	84-74-2	0.270	0.266	1.00	3	ug/l	J	8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, DI	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol ~~J5~~ UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	41.9				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	31.7				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	53.9				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	54.3				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	70.7				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	80.0				% Rec.		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW14-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 15:25

ESC Sample # : L800773-29

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate	14797-55-8	25400	2270	5000	10000	ug/l		9056MOD	11/13/15	100
Sulfate	14808-79-8	2660000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	8700000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	6660	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.457~~ 0.500	~~0.21~~ 0.457	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F SQL-I	7440-38-2	6.15	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	196.	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium F SQL-I	7440-41-7	0.832	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium F SQL, ICS-H	7440-43-9	0.239	0.16	0.500	1	ug/l	J	6020	11/17/15	1
Chromium ~~F SQL-I~~	7440-47-3	12.1	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	9.26	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	5.64	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron	7439-89-6	7280	15	500.	1000	ug/l		6020	11/17/15	1
Lead F SQL-I	7439-92-1	11.6	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	347.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	11.6	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F SQL-I	7782-49-2	12.8	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	21.3	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	54.3	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.102	~~0.049~~ 0.102	~~0.0800~~ 0.102	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-29

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW14-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 15:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) WT CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	3.36	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

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Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800773-29

Site ID :

Sample ID : TU904-MW14-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 15:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	99.3				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	102.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.0025	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00615~~	~~0.0041~~ B 0.00615	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene F SAL-I	91-20-3	0.0199	0.0198	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	108.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	101.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	84.1				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800773-29

Site ID :

Sample ID : TU904-MW14-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 15:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	38.1				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	29.7				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	48.9				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	54.4				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	67.1				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	74.1				% Rec.		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-30

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW14-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 15:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved FJ QL-I	7429-90-5	40.6	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	2.73	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved FJ QL-I	7440-39-3	33.0	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	14.6	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	7.13	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.111	~~0.049~~ 0.111	~~0.0800~~ 0.111	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW10-ND01

Collected By : Katie Abbott
Collection Date : 11/11/15 15:30

ESC Sample # : L800773-31

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved FSQL-I	7429-90-5	37.8	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	3.39	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	18.2	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Iron,Dissolved	7439-89-6	U	150	5000	10000	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved F SQL-I	7440-02-0	15.3	3.5	10.0	20	ug/l	J	6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	19.9	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	13.2	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	0.113	~~0.049~~ 0.113	~~0.0800~~ 0.113	0.2	ug/l	J	7470A	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-32

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW10-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 15:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate	14797-55-8	26300	2270	5000	10000	ug/l		9056MOD	11/13/15	100
Sulfate	14808-79-8	3410000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	10400000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	270.	2	50.0	100	ug/l		6020	11/17/15	1
Antimony	7440-36-0	U	0.21	0.500	2	ug/l		6020	11/17/15	1
Arsenic F SQL-I	7440-38-2	3.50	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	19.2	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	13.0	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper F SQL-I	7440-50-8	1.68	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt	7440-48-4	U	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron F SQL-I	7439-89-6	289.	15	500.	1000	ug/l	J	6020	11/17/15	1
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese F SQL-I	7439-96-5	4.52	0.25	0.500	5	ug/l	J	6020	11/17/15	1
Nickel	7440-02-0	7.86	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F SQL-I	7782-49-2	16.3	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	11.9	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.0899	~~0.049~~ 0.0899	~~0.0800~~ 0.0899	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-32

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW10-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 15:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) US CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-32

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW10-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 15:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	107.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	100.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U 0.025	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00639~~	~~0.0041~~ 0.00639	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	113.				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	108.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	102.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW10-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 15:30

ESC Sample # : L800773-32

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DM	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene UJ LCS-L	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U 1.00	0.283 0.331	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I	117-84-0	0.331	~~0.278~~	1.00	3	ug/l	J	8270C	11/18/15	1
1,2,4-Trichlorobenzene DM	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS+ D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	43.6				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	30.1				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	56.0				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	48.9				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	66.6				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	71.9				% Rec.		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW15-ND01

Collected By : Katie Abbott
Collection Date : 11/11/15 13:45

ESC Sample # : L800773-33

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F sal-1	7429-90-5	470.	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved F sal-1	7440-36-0	6.64	2.1	5.00	20	ug/l	J	6020	11/18/15	10
Arsenic,Dissolved F sal-1	7440-38-2	8.14	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F sal-1	7440-39-3	27.5	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved J MS-H	7440-41-7	4.42	1.2	5.00	20	ug/l	J	6020	11/18/15	10
Cadmium,Dissolved F sal-1	7440-43-9	4.63	1.6	5.00	10	ug/l	J	6020	11/18/15	10
Chromium,Dissolved F sal-1	7440-47-3	6.91	5.4	15.0	20	ug/l	J	6020	11/18/15	10
Copper,Dissolved F sal-1	7440-50-8	5.88	5.2	15.0	50	ug/l	J	6020	11/18/15	10
Cobalt,Dissolved F sal-1	7440-48-4	5.20	2.6	5.00	20	ug/l	J	6020	11/18/15	10
Iron,Dissolved F sal-1	7439-89-6	462.	150	5000	10000	ug/l	J	6020	11/18/15	10
Lead,Dissolved F sal-1	7439-92-1	4.29	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese,Dissolved F sal-1	7439-96-5	5.16	2.5	5.00	50	ug/l	J	6020	11/18/15	10
Nickel,Dissolved F sal-1	7440-02-0	6.04	3.5	10.0	20	ug/l	J	6020	11/18/15	10
Selenium,Dissolved F sal-1	7782-49-2	18.9	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved F sal-1	7440-22-4	5.66	3.1	5.00	20	ug/l	J	6020	11/18/15	10
Thallium,Dissolved F sal-1	7440-28-0	4.49	1.9	5.00	20	ug/l	J	6020	11/18/15	10
Vanadium,Dissolved F-sal-1	7440-62-2	13.0	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCB-I	7439-97-6	~~0.0570~~ 0.0800	~~0.049~~ 0.0570	0.0800	0.2	ug/l	J	7470A	11/16/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW15-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 13:45

ESC Sample # : L800773-34

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Nitrate	14797-55-8	34600	2270	5000	10000	ug/l	Q	9056MOD	11/13/15	100
Sulfate	14808-79-8	4860000	7740	50000	500000	ug/l		9056MOD	11/13/15	100
Methane	74-82-8	U	2.91	3.39	10	ug/l		RSK175	11/18/15	1
Sulfide	18496-25-8	U	6.5	39.0	50	ug/l		4500S2	11/17/15	1
Dissolved Solids	DSOLIDS	10200000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum J DL-L	7429-90-5	3910	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.403~~ 0.500	~~0.21~~ 0.403	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F SQL-1	7440-38-2	7.87	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium J DL-L	7440-39-3	276.	0.36	1.00	5	ug/l	O1V	6020	11/17/15	1
Beryllium F SQL-1	7440-41-7	0.670	0.12	0.500	2	ug/l	J	6020	11/17/15	1
Cadmium FJ SQL, ICS-H	7440-43-9	0.283	0.16	0.500	1	ug/l	J	6020	11/17/15	1
Chromium	7440-47-3	11.5	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	6.47	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	4.44	0.26	0.500	2	ug/l		6020	11/17/15	1
Iron J DL-L	7439-89-6	5390	15	500.	1000	ug/l		6020	11/17/15	1
Lead F SQL-1	7439-92-1	11.3	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese J DL-L	7439-96-5	244.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	6.93	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F SQL-1	7782-49-2	12.0	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	28.6	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	31.2	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	~~0.0644~~ 0.0800	~~0.049~~ 0.0644	0.0800	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane F SQL-1	75-27-4	0.459	0.38	0.500	1	ug/l	J	8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-34

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW15-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 13:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloroform F SQL-1 U FB-1	67-66-3	~~1.06~~ 2.50	~~0.324~~ 1.06	2.50	5	ug/l	J	8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene F SQL-1	75-35-4	0.409	0.398	0.500	1	ug/l	J	8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNL	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	13.6	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1

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February 02, 2016

ESC Sample # : L800773-34

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW15-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 13:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	102.				% Rec.		8260B	11/16/15	1
4-Bromofluorobenzene	460-00-4	103.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene U MB-I	56-55-3	0.00536	~~0.0041~~	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	102.				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	96.7				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	82.8				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J6~~	~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran UJ LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1

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February 02, 2016

ESC Sample # : L800773-34

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW15-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 13:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate ~~U MB-I~~	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U 1.00	0.283 0.314	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.314~~	~~0.278~~	1.00	3	ug/l	J	8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS + D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol UJ D-I	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS, D-L	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	37.5				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	27.8				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	44.7				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	49.1				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	55.5				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	67.8				% Rec.		8270C	11/18/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-35

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 17:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	10100000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	910	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.348~~ 0.500	~~0.21~~ 0.348	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic F Sal-I	7440-38-2	9.04	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium	7440-39-3	35.0	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	288.	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper	7440-50-8	18.3	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	4.87	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead F Sal-I	7439-92-1	2.51	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	62.6	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	358.	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F Sal-I	7782-49-2	13.4	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium	7440-62-2	30.8	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc F Sal-I	7440-66-6	12.1	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury U MB, CCB-I	7439-97-6	0.130	~~0.049~~ 0.130	~~0.0800~~ 0.130	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-35

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW04-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 17:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) w/ CCAL	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	2.37	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	104.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	102.				% Rec.		8260B	11/16/15	1

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ESC Sample # : L800773-35

Site ID :

Sample ID : TU904-MW04-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 17:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	103.				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U 0.025	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00611~~	~~0.0041~~ 0.00617	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	98.5				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	98.5				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	86.9				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R UJ LCS-L	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene UJ LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-35

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 17:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I DNR	117-84-0	~~0.298~~ 1.00	~~0.278~~ 0.298	1.00	3	ug/l	J	8270C	11/18/15	1
~~1,2,4-Trichlorobenzene~~	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-L	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS, D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	39.1				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	29.6				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	43.1				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	44.5				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	73.0				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	67.6				% Rec.		8270C	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-36

Site ID :

Project # : 60425210.0053AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW04-ND01

Collected By : Katie Abbott
Collection Date : 11/11/15 17:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved	7429-90-5	U	20	500.	1000	ug/l		6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	2.63	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved FSQL-I	7440-39-3	17.4	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved F SQL-I	7440-47-3	6.56	5.4	15.0	20	ug/l	J	6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved F SQL-I	7440-48-4	3.70	2.6	5.00	20	ug/l	J	6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	65.0	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	334.	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	14.2	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	8.17	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB, CCC B-I	7439-97-6	0.0970	~~0.049~~ 0.0970	~~0.0800~~ 0.0970	0.2	ug/l	J	7470A	11/16/15	1

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8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW19-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 16:30

ESC Sample # : L800773-37

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	9080000	2820	5000	10000	ug/l		2540 C-	11/18/15	1
Aluminum	7429-90-5	972	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.305~~ 0.500	~~0.21~~ 0.305	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/18/15	10
Barium	7440-39-3	79.3	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium U CCB-I	7440-47-3	3.65	~~0.54~~ 3.65	~~1.50~~ 3.65	~~2~~ 3.65	ug/l		6020	11/17/15	1
Copper F Sal-1	7440-50-8	1.67	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt F Sal-1	7440-48-4	1.15	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead F Sal-1	7439-92-1	3.38	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese	7439-96-5	82.8	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	2.75	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium F Sal-1	7782-49-2	9.38	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium F Sal-1	7440-62-2	4.97	0.18	0.500	5	ug/l	J	6020	11/17/15	1
Zinc F Sal-1	7440-66-6	17.7	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury U MB, ~~CCB~~ CCB-I	7439-97-6	0.107	~~0.049~~ 0.107	~~0.0800~~ 0.107	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW19-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 16:30

ESC Sample # : L800773-37

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK) UJ CCAL	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
~~Naphthalene DNR~~	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	104.				% Rec.		8260B	11/16/15	1

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February 02, 2016

ESC Sample # : L800773-37

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW19-NT01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 16:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	95.6				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00762~~ 0.025	~~0.0041~~ 0.00767	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	104.				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	104.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	90.0				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/18/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/18/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/18/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/18/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Dibenzofuran U LCS-L	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/18/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/18/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/18/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/18/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/18/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/18/15	1
Hexachlorobenzene U J LCS-L	118-74-1	U	0.341	0.500	1	ug/l	J3	8270C	11/18/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/18/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/18/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU904-MW19-NT01

Collected By : Katie Abbott
Collection Date : 11/11/15 16:30

ESC Sample # : L800773-37

Site ID :

Project # : 60425210.0053AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/18/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/18/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/18/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/18/15	1
Di-n-butyl phthalate F SQL-L	84-74-2	0.325	0.266	1.00	3	ug/l	J	8270C	11/18/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/18/15	1
Dimethyl phthalate	131-11-3	U 1.00	0.282	1.00	3	ug/l		8270C	11/18/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.292~~	~~0.278~~ 0.292	1.00	3	ug/l	J	8270C	11/18/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/18/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/18/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/18/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/18/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/18/15	1
2,4-Dinitrophenol UJ LCS+ D-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/18/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l	J3	8270C	11/18/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/18/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/18/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/18/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/18/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/18/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/18/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/18/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/18/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/18/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/18/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/18/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/18/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	26.1				% Rec.		8270C	11/18/15	1
Phenol-d5	4165-62-2	18.7				% Rec.		8270C	11/18/15	1
Nitrobenzene-d5	4165-60-0	30.1				% Rec.		8270C	11/18/15	1
2-Fluorobiphenyl	321-60-8	38.4				% Rec.		8270C	11/18/15	1
2,4,6-Tribromophenol	118-79-6	48.9				% Rec.		8270C	11/18/15	1
p-Terphenyl-d14	1718-51-0	63.7				% Rec.		8270C	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800773-38

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-MW19-ND01

Project # : 60425210.0053AB

Collected By : Katie Abbott
Collection Date : 11/11/15 16:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	67.5	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	39.6	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	55.3	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	12.6	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	3.03	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10
Mercury,Dissolved U MB-I	7439-97-6	0.0895	~~0.049~~ 0.0895	~~0.0800~~ 0.0895	0.2	ug/l	J	7470A	11/16/15	1

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Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L800806
Sampling Event Dates: November 10, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Katie Abbott, URS Project Chemist
Date Completed: February 1, 2016
Peer Reviewer: Sheri Fling, URS Project Quality Assurance Manager (QAM)

The table below summarizes the data package and sample identifications discussed in this data review.

Field Identification	Sample Type	Lab Identification	Matrix	Analyses					
				VOCs	SVOCs	PAHs	Total Metals	Dissolved Metals	TDS
TU518-MW05-NT01	SA	L800806-01	Water	X	X	X	X	---	X
TU518-MW05-ND01	SA	L800806-02	Water	---	---	---	---	X	---
TU518-MW08-NT01	SA	L800806-03	Water	X	X	X	X	---	X
TU518-MW08-ND01	SA	L800806-04	Water	---	---	---	---	X	---
TU518-MW04-NT01	SA	L800806-05	Water	X	X	X	X	---	X
TU518-MW04-ND01	SA	L800806-06	Water	---	---	---	---	X	---
TU518-MW07-NT01	SA	L800806-07	Water	X	X	X	X	---	X
TU518-MW07-ND01	SA	L800806-08	Water	---	---	---	---	X	---
TU518-MW06-NT01	SA	L800806-09	Water	X^m	X^m	X^m	X^m	---	X
TU518-MW06-ND01	SA	L800806-10	Water	---	---	---	---	X^m	---

Sample Type: SA – Sample
X^m - Matrix Spike/Matrix Spike Duplicate
Analyses: TDS – Total Dissolved Solids (SM2540C)
Total/Dissolved Metals – Antimony, Arsenic, Cadmium, Chromium, Cobalt, Lead, Nickel, Selenium, Silver, Thallium, Mercury, Aluminum, Barium, Beryllium, Copper, Manganese, Vanadium, Zinc (6020/7470A)
PAHs – Polynuclear Aromatic Hydrocarbons (8270C SIM)
SIM – Selective Ion Monitoring
SVOCs – Semivolatile Organic Compounds (8270C)
VOCs – Volatile Organic Compounds (8260B)

The data review was conducted in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14;

Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

General Overall Assessment:

_____ Data are usable without qualification.
_____ Data are usable with qualification (noted below).
__X__ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any laboratory case narrative comments concerning data qualification were addressed in the table below.

Trace level detects, reported between the method detection limit (MDL) and the reporting limit (LOQ), have been qualified as estimated (F SQL-I). All other occurrences of data qualification are covered in the following table.

Review Parameter	Criteria Met?	Comment
Chain of Custody & Sample Receipt	No	The samples were received by ESC Lab Sciences in good condition and were consistent with the accompanying chain of custody (COC). The cooler temperatures upon receipt were within the recommended ≤6 degrees Celsius (°C) temperature range. The samples were shipped to the laboratory with the volatile organic analysis (VOA) vials for the volatile organic compounds (VOCs) analysis in one cooler and the other sample containers (e.g., metals) in separate coolers. A complete signed original COC was included in each of the coolers with a footnote that stated the following: the circled analyses represent those analyses for which bottles are contained in this cooler. However, upon arrival at the laboratory, sample receiving discarded one of the two COCs submitted for each sample assuming one COC was a duplicate. As this had no impact on sample login or reporting of results, data qualification was not necessary. Trip blanks samples were included in each cooler containing samples to be analyzed for VOCs and gasoline range organics (GROs). However, upon receipt the trip blank samples and the field blank samples were logged into two data packages and therefore, not reported with the samples from the same cooler. The associated trip blanks were identified based on the field notes and qualification was only extended to results for those samples shipped in the same cooler as the trip blank. The field blanks were assessed collectively and any resultant qualification was discussed in Section 4.4 of the validation report.
Reporting	Yes	**Revised Reports** Revised reports were required to remove 2-chloronaphthalene from the polynuclear aromatic hydrocarbon (PAH) analyte list and to correct the methyl cyclohexane results. **Method 8260B (VOCs)** During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference

Review Parameter	Criteria Met?	Comment
		spectra taken from the instrument calibration, the analyst was not seeing the improper alignment of spectra noted in the data package during his/her review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding. **Method 8270C Semivolatile Organic Compounds (SVOCs)** The results for 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene were not reported by Method 8270C SVOCs but were reported by Method 8260B VOCs. As the detection limits (DLs), limits of detection (LODs), and limits of quantitation (LOQs) are lower by Method 8260B, further action was not necessary. The laboratory noted 4-methylphenol cannot be reported as 3 & 4-methylphenol coelute during the analysis; therefore, the analytes are reported together and 3&4-methylphenol on the data sheets and in the electronic database.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method Blank • Continuing Calibration Blank	No	With the exceptions listed in Table 1, target analytes were not detected within the method or calibration blanks.
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate TU518-MW06-NT01 (Total Metals, VOCs, SVOCs, PAHs) TU518-MW06-ND01 (Dissolved Metals) • Total vs. Partial Analyses (Metals)	No	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the quality assurance project plan (QAPP) requirement of one per twenty samples. With the exception listed in Table 2, the MS/MSD recoveries and relative percent differences (RPDs) met quality control criteria. Results in the native sample greater than four times the concentration of the spike added during digestions/extractions are not considered to be a representative measure of accuracy. Further action with respect to spike recovery evaluation or qualification of data was not considered necessary. Consistent with standard operating procedure (SOP) 14, when MS/MSD issues accounted for less than 35% of the MS/MSD analyses conducted, applicable data qualification was limited to qualification of the parent sample of the affected analyte. When >35% of the MS/MSD results did not meet criteria, evaluation was extended to all associated samples. See Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation. **Total vs. Partial Analyses (Metals)** Consistent with SOP 14, results for the total analysis of a particular analyte should be greater than the results for a partial analyte of that analyte. The following criteria were used to evaluate the total versus dissolved results: • In instances where the value for a partial analysis exceed that for a total analysis and both of the results are >5xLOQ, the criterion utilized is that the two values should agree within ±30%. • In instances where the value for a partial analysis exceeds that for a total analysis and either of the results is 5xLOQ, the absolute difference between the results is compared against an evaluation criterion of 2xLOQ.

Review Parameter	Criteria Met?	Comment
		With the exceptions listed in Table 3, he total metal sample results and associated dissolved sample results met the concentration-dependent criteria.
Metals Only • Serial Dilution TU518-MW06-NT01 (6020 Total Metals) TU518-MW06-ND01 (6020 Dissolved Metals)	No	**Serial Dilution (Metals Only)** Consistent with the method, only the results that were greater than 50 times their respective DLs were appropriate for comparing to the serial dilution evaluation criterion. With the exceptions listed in Table 4, all percent differences (%Ds) between the original sample results and the results obtained from the sample-diluted 1:5 were ≤10%.
Method Quality Control • Surrogates (VOCs, PAHs, SVOCs)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank None in this package • Field Duplicate None in this package • Equipment Blank None in this package • Field Blank None in this package	NA	**Trip Blank** A trip blank sample was submitted with the coolers; it was reported and evaluated in separate data packages (L800830 and L801106). **Field Duplicate** The frequency of field duplicates met the QAPP requirement of one per twenty samples. A field duplicate was not submitted with the data package. Consistent with SOP 14, when field duplicate issues accounted for less than 35% of the field duplicate analyses conducted, applicable data qualification was limited to qualification of the parent sample for the affected analyte. When >35% of the field duplicate results did not meet criteria, evaluation was extended to all associated samples. See Section 4.3 of the data validation report for overall qualifiers resulting from the field duplicate evaluation. **Equipment Blank** As dedicated equipment was used to collect these samples, an equipment blank was not submitted for this sampling event. Further action was not necessary. **Field Blank** The frequency of field blanks met the QAPP requirement of one per twenty samples. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.
LODs met?	No	Due to dilutions, several dissolved metals results were reported as non-detect or estimated at elevated LODs. See Section 3.6 of the validation report for further discussion.
Other Parameters	Yes	Naphthalene (8260B and 8270C- PAHs) and hexachloro-1,3-butadiene and 1,2,4-trichlorobenzene (8260B and 8270C) were analyzed by multiple methods. Results were selected for reporting using the following criteria: • If both results were non-detect, the non-detect result with the lower DL was selected. • If both results were reported as detected, the higher detected result was selected for reporting.

Review Parameter	Criteria Met?	Comment
		• If one result was reported as non-detect and the other result was reported as detected, the detected result was selected for reporting.
Initial Calibration	Yes	**Methods 8260B VOCs & 8270C SVOCs** A minimum relative response factor (RRF) of 0.05 was used for the system performance check compounds (SPCCs) and all SPCCs met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a requirement of 15% was used. The %RSD values for all target analytes in the calibration were less than 15%. Therefore, the initial calibration met method acceptance criteria. **Method 8270C PAHs** The %RSD values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **Method 6020 (Inductively Coupled Plasma Mass Spectrometer (ICPMS) Metals) & 7470A Mercury** The initial calibrations (ICALs) were performed in association with the samples reported in this package. The relationship between instrument response and concentration was established with a blank and at least five standards. The calibrations were verified with the analysis of an initial calibration verification (ICV) standard. All metals were recovered within the method acceptance range of 90-110%. **Total Dissolved Solids (TDS)** ICALs are not required per the method for TDS.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** With the exception listed in Table 5, the %Ds for all CCCs in the ICVs and continuing calibrations (CCALs) were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 20%. **Methods 8270C SVOCs & 8270C PAHs** With the exceptions listed in Table 5, the %D values for all target analytes in the calibration were less than 20%. **Method 6020 (ICPMS Metals)** Calibration verification analyses were conducted at the proper frequency. All metals were recovered within the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2 low level acceptance range of 80-120% and the method medium/high acceptance range of 90-110%. **Method 7470A Mercury** Calibration verification analyses were conducted at the proper frequency. All results were recovered within the DoD QSM version 4.2 acceptance range of 90-110%. A low level calibration verification is not required per DoD QSM version 4.2; therefore, laboratory limits were used. **TDS** Calibration verifications are not required for TDS.

Review Parameter	Criteria Met?	Comment
Interference Check Standard (Metals Only)	No	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 80-120% in the ICS AB solution. With the exceptions listed in Table 6, interferent elements were not present in the samples at concentrations greater than those in the ICSs. The interferent elements aluminum, calcium, iron, potassium, magnesium, molydenum, sodium, and/or titanium were present in most samples in this data package at concentrations greater than or equal to those in the ICSs. As such, these samples were evaluated for positive and negative biases suggested by the ICS A. Data qualification was issued if the absolute value of the ICS A result was greater than the DL and it suggested a positive or negative bias which accounted for more than 25% of associated sample results or LODs. (Note: The ICS A solution only contains the interferent elements aluminum, calcium, iron, and magnesium so any positive or negative result for other analytes is inferred to be a bias potentially caused by one or more of the interferent elements present). Table 6 summarizes the resultant data qualification on the basis of the ICS results.
Internal Standard (VOCs/PAHs/Metals (6020))	Yes	Recoveries for the internal standards in field samples were within the applicable acceptance limits. Therefore, data qualification based on internal standards was not necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate	No	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. With the exceptions listed in Table 7, all of the LCS recoveries and LCS/LCSD RPDs were within the QAPP acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Package Completeness	No	With the exception of the benzoic acid results, which were qualified as unusable due to LCS/LCSD recoveries <10%, the results are usable as qualified for the project objective. The data are 99% complete.

> - Greater Than
< - Less Than
≤ - Less Than or Equal to
± - Plus or Minus
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCCs – Calibration Check Compounds
COC – Chain of Custody
DLs – Detection Limits
DoD – Department of Defense
GRO – Gasoline Range Organics
ICAL – Initial Calibration
ICPMS - Inductively Coupled Plasma Mass Spectrometry
ICS – Interference Check Standard
ICV – Initial Calibration Verification
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
LOQ – Limit of Quantitation
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
NA – Not Applicable
PAHs – Polynuclear Aromatic Hydrocarbons
PDS – Post Digestion Spike
QAPP – Quality Assurance Project Plan
QSM – Quality Systems Manual
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
SVOCs – Semivolatile Organic Compounds
TDS – Total Dissolved Solids
VOA – Volatile Organic Analysis
VOCs – Volatile Organic Compounds

Table 1: Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
Total Metals			
MB Batch WG829003 TU518-MW05-NT01 TU518-MW08-NT01 TU518-MW04-NT01 TU518-MW07-NT01 TU518-MW06-NT01	Aluminum	13.8 µg/L	None. The associated results were reported at concentrations >5x the concentration of the blank contamination.
	Barium	1.37 µg/L	
CCB WG829003 TU518-MW05-NT01 TU518-MW08-NT01 TU518-MW04-NT01 TU518-MW07-NT01 TU518-MW06-NT01	Aluminum	2.4 µg/L	
CCB WG829003 TU518-MW05-NT01 TU518-MW08-NT01 TU518-MW04-NT01 TU518-MW07-NT01	Antimony	0.281 µg/L	The associated antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
Dissolved Metals			
MB Batch WG829716 TU518-MW05-ND01 TU518-MW08-ND01 TU518-MW04-ND01 TU518-MW07-ND01 TU518-MW06-ND01	Dissolved Mercury	0.0712 µg/L	The associated dissolved mercury results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
MB Batch WG829005 TU518-MW05-ND01 TU518-MW08-ND01 TU518-MW04-ND01 TU518-MW07-ND01 TU518-MW06-ND01	Dissolved Aluminum	3.06 µg/L	None. The associated dissolved aluminum results were reported at concentrations >5x the concentration of the blank contamination.
	Dissolved Antimony	0.280 µg/L	The associated dissolved antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Dissolved Barium	0.415 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Dissolved Lead	0.299 µg/L	
	Dissolved Vanadium	0.468 µg/L	The associated dissolved vanadium result for sample TU518-MW06-ND01 was reported at a concentration <5x the concentration of the blank contamination and was qualified as non-detect (U MB-I).
CCB WG829005 TU518-MW05-ND01 TU518-MW08-ND01 TU518-MW04-ND01 TU518-MW07-ND01 TU518-MW06-ND01	Dissolved Antimony	0.245 µg/L	The associated dissolved antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).

Associated Samples	Analyte	Concentration	Qualification
CCB WG829005 TU518-MW05-ND01 TU518-MW08-ND01 TU518-MW04-ND01 TU518-MW07-ND01	Dissolved Manganese	0.255 µg/L	None. The associated dissolved manganese results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Dissolved Antimony	0.226 µg/L	The associated dissolved antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
SVOCs			
MB Batch WG829904 TU518-MW05-NT01 TU518-MW08-NT01 TU518-MW04-NT01 TU518-MW07-NT01 TU518-MW06-NT01	Di-n-butyl Phthalate	0.384 µg/L	The associated di-n-butyl phthalate results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
PAHs			
MB Batch WG828995 TU518-MW06-NT01	Benzo(a)anthracene	0.00658 µg/L	The associated benzo(a)anthracene result for sample TU518-MW06-NT01 was reported at a concentration <5x the concentration of the blank contamination and was qualified as non-detect (U MB-I).
	Benzo(b)fluoranthene	0.00223 µg/L	None. The associated results were reported as non-detect.
	Benzo(g,h,i)perylene	0.00274 µg/L	
MB Batch WG829386 TU518-MW05-NT01 TU518-MW08-NT01 TU518-MW04-NT01 TU518-MW07-NT01	1-Methylnaphthalene	0.0100 µg/L	None. The associated 1-methylnaphthalene results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	2-Methylnaphthalene	0.0113 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Benzo(a)anthracene	0.0150 µg/L	
	Benzo(b)fluoranthene	0.0109 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Benzo(g,h,i)perylene	0.0126 µg/L	
	Chrysene	0.0113 µg/L	
	Dibenz(a,h)anthracene	0.00979 µg/L	
	Fluorene	0.00940 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Naphthalene	0.0374 µg/L	
	Phenanthrene	0.0136 µg/L	

> - Greater Than
< - Less Than
µg/L – Micrograms per Liter
CCB – Continuing Calibration Blank
I – Indeterminate Bias
MB – Method Blank
PAHs – Polynuclear Aromatic Hydrocarbons
SVOCs – Semivolatile Organic Compounds
U – Non-detect

Table 2: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
SVOCs				
TU518-MW06-NT01	2,4-Dinitrophenol	63.7/45.1 (15-140)	**34.1** (30)	As the RPD was outside of control limits, the associated 2,4-dinitrophenol result for sample TU518-MW06-NT01 was qualified as estimated (UJ D-I).
	4-Nitroaniline	**133**/112 (35-120)	17.1 (30)	As the potential bias was considered to be high, and the associated 4-nitroanailine result was reported as non-detect, data qualification was not considered necessary.
	Benzoic Acid	30.5/20.7 (10-125)	**38.3** (30)	As the benzoic acid result for sample TU518-MW06-NT01 was qualified as unusable due to LCS/LCSD recoveries <10%, data qualification was not considered necessary.

%R – Percent Recoveries
% - Percent
< - Less Than
D – Duplicate
I – Indeterminate Bias
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
MS/MSD – Matrix Spike Matrix Spike Duplicate
RPD – Relative Percent Difference
SVOCs – Semivolatile Organic Compounds
UJ – Estimated
Bold indicates a recovery or RPD outside of acceptance limit

Table 3: Total vs. Partial Outliners and Resultant Data Qualification

Sample	Analyte	Total Result (µg/L)	Dissolved Result (µg/L)	Criteria not Met	Qualification
TU518-MW05-NT01/ TU518-MW05-ND01	Arsenic	9.30	17.1	Absolute Difference >2x LOQ	As the absolute difference between the total and dissolved results exceeded 2x the LOQ, results were qualified as estimated (J TvP-I).
	Antimony	37.6	89.3	RPD >30%	As the RPD between the total and dissolved results exceeded 30%, results were qualified as estimated (J TvP-I).

µg/L – Micrograms per Liter
> - Greater Than
% - Percent
I – Indeterminate Bias
J – Estimated
LOQ – Limit of Quantitation
RPD – Relative Percent Difference
TvP – Total versus Partial

Table 4: Serial Dilution Outliers and Resultant Data Qualification

Associated Sample	Analyte	Parent Sample Result (µg/L)	Serial Dilution Result (µg/L)	%D (Limits)	Qualification
Total Metals					
TU518-MW06-NT01	Manganese	31.931	35.976	**13** (10)	The associated sample results were qualified as estimated (J DL-L). The bias is considered to be low as the native sample concentration is less than the diluted result.
Dissolved Metals					
TU518-MW06-ND01	Manganese	31.376	36.474	**13** (10)	The associated sample results were qualified as estimated (J DL-L). The bias is considered to be low as the native sample concentration is less than the diluted result.

µg/L – Micrograms per Liter
%D – Percent Difference
DL – Serial Dilution
J – Estimated
L – Low Bias
Bold indicates a recovery or RPD outside of acceptance limits

Table 5: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
VOCs			
TU518-MW05-NT01 TU518-MW08-NT01 TU518-MW04-NT01 TU518-MW07-NT01 TU518-MW06-NT01	Bromomethane	+39.9 (±20)	As the potential bias was considered to be high, and the associated samples were reported as non-detect, data qualification was not considered necessary.
	2-Butanone	+26.8 (±20)	
	4-Methyl-2-pentanone	+23.2 (±20)	
SVOCs			
TU518-MW05-NT01 TU518-MW08-NT01 TU518-MW04-NT01 TU518-MW07-NT01 TU518-MW06-NT01	n-Nitrosodimethylamine	+54.3 (±20)	As the potential bias was considered to be high, and the associated samples were reported as non-detect, data qualification was not considered necessary.
	Bis(2-chloroethyl)ether	+30.2 (±20)	
	3&4-Methyl Phenol	-49.6 (±20)	As the potential bias was considered to be low, the associated 3&4-methyl phenol results were qualified as estimated (UJ CCAL-L).
	n-Nitrosodimethylamine	+39.7 (±20)	As the potential bias was considered to be high, and the associated samples were reported as non-detect, data qualification was not considered necessary.
	Bis(2-chloroethyl)ether	+21.4 (±20)	
	3&4-Methyl Phenol	-50.0 (±20)	As the potential bias was considered to be low, the associated 3&4-methyl phenol results were qualified as estimated (UJ CCAL-L).

± - Plus or minus
%D – Percent Difference
CCAL – Continuing Calibration
L – Low Bias
SVOCs – Semivolatile Organic Compounds
UJ – Estimated
VOCs – Volatile Organic Compounds

Table 6: ICS Outliers and Resultant Data Qualification

Interferent Element	Analyte	ICS A (µg/L)	DL (µg/L)	Qualified Samples	Qualification
Calcium, Magnesium, Sodium	Total Copper	0.60	0.52	TU518-MW05-NT01 TU518-MW07-NT01	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
	Total Chromium	1.2	0.54	TU518-MW05-NT01	
Calcium, Magnesium, Potassium, Sodium				TU518-MW08-NT01 TU518-MW06-NT01	
Calcium, Magnesium, Sodium	Dissolved Cadmium	0.20	0.16	TU518-MW08-ND01	
	Dissolved Chromium	1.2	0.54		

µg/L – Micrograms per Liter
ICS – Interference Check Standard
DL – Detection Limit
J - Estimated
H – High Bias

Table 7: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
SVOCs				
LCS WG829904 TU518-MW05-NT01 TU518-MW08-NT01 TU518-MW04-NT01 TU518-MW07-NT01 TU518-MW06-NT01	2,4-Dinitrophenol	37.4/61.8 (15-140)	**49.2** (30)	As the RPD was outside of control limits, the associated results were qualified as estimated (J LCS-I).
	4-Nitroaniline	**134/138** (32-120)	2.86 (30)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.
	Benzoic Acid	**6.11**/11.1 (10-125)	**58.1** (30)	As the RPD was outside of control limits, and the percent recovery was <10%, the associated non-detect benzoic acid results were qualified as unusable (R) and the associated detected benzoic acid results were qualified as estimated (J LCS-L).
PAHs				
LCS WG829386 TU508-MW01-NT01 TU508-MW02-NT01 TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01	Acenaphthene	103/**111** (45-110)	7.09 (20)	As the potential bias was considered to be high, the associated detected results for sample TU518-MW08-NT01 were qualified as estimated (J LCS-H).
	Acenaphthylene	105/**112** (50-105)	5.72 (20)	
	Anthracene	**116/121** (55-110)	4.18 (20)	
	Benzo(a)anthracene	**116/121** (55-110)	4.11 (20)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.
	Benzo(a)pyrene	**122/126** (55-110)	3.08 (20)	
	Benzo(b)fluoranthene	117/**130** (45-120)	10.4 (20)	
	Benzo(g,h,i)perylene	123/**132** (40-125)	6.99 (20)	
	Benzo(k)fluoranthene	**128**/123 (45-125)	3.96 (20)	
	Chrysene	**121/126** (55-110)	4.13 (20)	

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
	Fluoranthene	**119/124** (55-115)	3.03 (20)	As the potential bias was considered to be high, the associated detected results for sample TU518-MW08-NT01 were qualified as estimated (J LCS-H).
	Fluorene	108/**114** (50-110)	4.26 (20)	
	Indeno(1,2,3-c,d)pyrene	123/**129** (45-125)	5.85 (20)	
	Phenanthrene	115/**118** (50-115)	3 (20)	

%R – Percent Recoveries
H – High Bias
I – Indeterminate Bias
J – Estimated
L – Low Bias
LCS – Laboratory Control Sample
PAHs – Polynuclear Aromatic Hydrocarbons
RPD – Relative Percent Difference
SVOCs – Semivolatile Organic Compounds
Bold indicates a recovery outside of acceptance limits.

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800806-01

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-MW05-NT01

Project # : 60425210.0058AB

Collected By : Katie Abbott
Collection Date : 11/10/15 14:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	7380000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum	7429-90-5	275.	2	50.0	100	ug/l		6020	11/16/15	1
Antimony J TVP-I	7440-36-0	37.6	0.21	0.500	2	ug/l		6020	11/16/15	1
Arsenic J TVP-I	7440-38-2	9.30	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	24.6	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/16/15	1
Chromium FJ SQL, ICS-H	7440-47-3	0.867	0.54	1.50	2	ug/l	J	6020	11/16/15	1
Copper FJ SQL, ICS-H	7440-50-8	0.654	0.52	1.50	5	ug/l	J	6020	11/16/15	1
Cobalt F SQL-I	7440-48-4	0.528	0.26	0.500	2	ug/l	J	6020	11/16/15	1
Lead F SQL-I	7439-92-1	0.346	0.24	0.500	2	ug/l	J	6020	11/16/15	1
Manganese	7439-96-5	59.1	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel F SQL-I	7440-02-0	1.44	0.35	1.00	2	ug/l	J	6020	11/16/15	1
Selenium F SQL-I	7782-49-2	0.852	0.38	1.00	2	ug/l	J	6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium	7440-62-2	8.59	0.18	0.500	5	ug/l		6020	11/16/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

U = Not Detected at the LOD
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
Reported: 11/20/15 18:16 Revised: 02/02/16 20:43

KA 2/1/16

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800806-01

Site ID :

Sample ID : TU518-MW05-NT01

Project # : 60425210.0058AB

Collected By : Katie Abbott
Collection Date : 11/10/15 14:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride ~~FIQL-I~~ UTB-I	75-09-2	~~1.27~~ 2.50	~~1~~ 1.27	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW05-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 14:50

ESC Sample # : L800806-01

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	98.1				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00655~~	~~0.0041~~ 0.0250	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene U MB-I	86-73-7	~~0.00992~~ 0.0250	~~0.0085~~ 0.0250	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-I	91-20-3	0.0320	~~0.0198~~ 0.0320	~~0.0250~~ 0.0320	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene U MB-I	85-01-8	~~0.0182~~ 0.0250	~~0.0082~~ 0.0250	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene F SQL-I	90-12-0	0.0645	0.00821	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
2-Methylnaphthalene U MB-I	91-57-6	0.0489	~~0.00902~~ 0.0489	~~0.0250~~ 0.0489	0.25	ug/l	J	8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	98.2				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	105.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	106.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
~~Benzoic acid R~~	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
~~Hexachloro-1,3-butadiene DNR~~	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW05-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 14:50

ESC Sample # : L800806-01

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U 1.0	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate U MB-I	84-74-2	~~0.660~~	~~0.266~~ 0.266	1.00	3	ug/l	J	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS+D-I	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	42.2				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	36.0				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	65.3				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	82.5				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	79.7				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	85.5				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW05-ND01

Collected By : Katie Abbott
Collection Date : 11/10/15 14:50

ESC Sample # : L800806-02

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	22.3	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved J TVP-I	7440-36-0	89.3	0.21	0.500	2	ug/l		6020	11/17/15	1
Arsenic,Dissolved J TvP+MS-H	7440-38-2	17.1	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	11.7	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved	7440-50-8	U	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt,Dissolved F SQL-I	7440-48-4	0.266	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved F SQL-I	7439-92-1	5.03	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese,Dissolved	7439-96-5	48.9	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved F SQL-I	7440-02-0	1.49	0.35	1.00	2	ug/l	J	6020	11/17/15	1
Selenium,Dissolved FJ SQL,MS-H	7782-49-2	0.785	0.38	1.00	2	ug/l	J	6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	9.10	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800806-03

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-MW08-NT01

Project # : 60425210.0058AB

Collected By : Katie Abbott
Collection Date : 11/10/15 14:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	23800000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum	7429-90-5	384.	2	50.0	100	ug/l		6020	11/16/15	1
Antimony U CCB-I	7440-36-0	1.23	~~0.21~~ 1.23	~~0.500~~ 1.23	2	ug/l	J	6020	11/16/15	1
Arsenic	7440-38-2	3.21	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	64.1	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium F sal-1	7440-43-9	0.910	0.16	0.500	1	ug/l	J	6020	11/16/15	1
Chromium FJ SQL, ICS-H	7440-47-3	1.02	0.54	1.50	2	ug/l	J	6020	11/16/15	1
Copper F sal-1	7440-50-8	2.46	0.52	1.50	5	ug/l	J	6020	11/16/15	1
Cobalt	7440-48-4	4.64	0.26	0.500	2	ug/l		6020	11/16/15	1
Lead F sal-1	7439-92-1	0.904	0.24	0.500	2	ug/l	J	6020	11/16/15	1
Manganese	7439-96-5	927.	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel	7440-02-0	9.93	0.35	1.00	2	ug/l		6020	11/16/15	1
Selenium	7782-49-2	12.0	0.38	1.00	2	ug/l		6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium	7440-62-2	5.13	0.18	0.500	5	ug/l		6020	11/16/15	1
Zinc F sal-1	7440-66-6	12.4	2.56	5.00	25	ug/l	J	6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene F sal-1	71-43-2	0.976	0.331	0.500	1	ug/l	J	8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	1.16	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide F-sal-1	75-15-0	0.397	0.275	0.500	1	ug/l	J	8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800806-03

Sample ID : TU518-MW08-NT01

Site ID :

Project # : 60425210.0058AB

Collected By : Katie Abbott
Collection Date : 11/10/15 14:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	1.25	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride ~~p-Sat-I~~ UTB-I	75-09-2	~~1.40~~ 2.50	~~1~~ 1.40	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	104.				% Rec.		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW08-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 14:45

ESC Sample # : L800806-03

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	96.2				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene J LCS-H	120-12-7	0.131	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene J LCS-H	83-32-9	0.436	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene J LCS-H MS-H	208-96-8	~~0.0234~~ 0.0234	~~0.012~~ 0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene UMB-I	56-55-3	~~0.00806~~ 0.00806	~~0.0041~~ 0.0041	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene FJ SQL, LCS-H	206-44-0	0.0173	0.0157	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Fluorene J LCS-H	86-73-7	0.200	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene J LCS-H	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	0.464	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene J LCS-H	85-01-8	1.02	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	0.110	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	0.809	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene F SQL-I	91-57-6	0.157	0.00902	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	95.1				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	107.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	107.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
~~Benzoic acid R~~	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	~~1~~
Dibenzofuran F SQL-I	132-64-9	0.622	0.338	5.00	10	ug/l	J	8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
~~Hexachloro-1,3-butadiene DNR~~	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW08-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 14:45

ESC Sample # : L800806-03

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate U MB-I	84-74-2	~~0.911~~ 1.00	~~0.266~~ 0.911	1.00	3	ug/l	J	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DMR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol U5 LCS,D-I	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol U5 CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	38.9				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	35.9				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	60.6				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	68.8				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	113.				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	89.9				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800806-04

Site ID :

Project # : 60425210.0058AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW08-ND01

Collected By : Katie Abbott
Collection Date : 11/10/15 14:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved	7429-90-5	129.	2 1.24	50.0 1.24	100	ug/l		6020	11/17/15	1
Antimony,Dissolved U MB, CCB-I	7440-36-0	1.24	~~0.21~~	~~0.500~~	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	4.04	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	49.6	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved FJ SQL, ICS-H	7440-43-9	0.538	0.16	0.500	1	ug/l	J	6020	11/17/15	1
Chromium,Dissolved FJ SQL, ICS-H	7440-47-3	0.556	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper,Dissolved FJ SQL, MS-H	7440-50-8	0.920	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved	7440-48-4	3.56	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead,Dissolved F SQL-I	7439-92-1	5.14	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese,Dissolved	7439-96-5	739.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	8.31	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	8.70	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	5.36	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved F SQL-I	7440-66-6	7.26	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.05~~23 0.0800	~~0.049~~ 0.523	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 13:55

ESC Sample # : L800806-05

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	8940000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum FSOL-I	7429-90-5	38.7	2	50.0	100	ug/l	J	6020	11/16/15	1
Antimony U CCB-I	7440-36-0	~~0.239~~ 0.500	~~0.21~~ 0.239	0.500	2	ug/l	J	6020	11/16/15	1
Arsenic	7440-38-2	3.97	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	23.7	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/16/15	1
Chromium	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/16/15	1
Copper	7440-50-8	U	0.52	1.50	5	ug/l		6020	11/16/15	1
Cobalt	7440-48-4	U	0.26	0.500	2	ug/l		6020	11/16/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/16/15	1
Manganese	7439-96-5	104.	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel FSOL-I	7440-02-0	0.530	0.35	1.00	2	ug/l	J	6020	11/16/15	1
Selenium	7782-49-2	U	0.38	1.00	2	ug/l		6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium FSOL-I	7440-62-2	2.46	0.18	0.500	5	ug/l	J	6020	11/16/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 13:55

ESC Sample # : L800806-05

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride U TB-I	75-09-2	~~1.25~~ 2.50	~~1~~ 1.25	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	104.				% Rec.		8260B	11/16/15	1

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February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 13:55

ESC Sample # : L800806-05

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	98.0				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.0250	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00603~~	~~0.0041~~ 0.00603	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-I	91-20-3	0.0305	~~0.0196~~ 0.0305	~~0.0250~~ 0.0305	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	98.5				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	105.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	106.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800806-05

Site ID :

Project # : 60425210.0058AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 13:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate F SQL-1	117-84-0	0.329	0.278	1.00	3	ug/l	J	8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS, ~~CD~~-1	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	55.2				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	35.1				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	65.0				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	76.7				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	72.8				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	91.3				% Rec.		8270C	11/19/15	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800806-06

Sample ID : TU518-MW04-ND01

Site ID :

Project # : 60425210.0058AB

Collected By : Katie Abbott
Collection Date : 11/10/15 13:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-1	7429-90-5	22.3	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved UMB, CC B-I	7440-36-0	~~0.283~~ 0.500	~~0.21~~ 0.283	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	4.01	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	22.2	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved FJ SQL, ICS-H	7440-47-3	0.720	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper,Dissolved FJ SQL, MS-H	7440-50-8	2.49	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved F SQL-1	7440-48-4	0.305	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved F SQL-1	7439-92-1	5.95	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese,Dissolved	7439-96-5	89.3	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved F SQL-1	7440-02-0	0.663	0.35	1.00	2	ug/l	J	6020	11/17/15	1
Selenium,Dissolved	7782-49-2	U	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	2.35	0.18	0.500	5	ug/l	J	6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0557~~ 0.0800	~~0.049~~ 0.0857	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW07-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:50

ESC Sample # : L800806-07

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	6360000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum F SQL-I	7429-90-5	63.1	2	50.0	100	ug/l	J	6020	11/16/15	1
Antimony U CCB-I	7440-36-0	0.819	~~0.21~~ 0.819	~~0.500~~ 0.819	2	ug/l	J	6020	11/16/15	1
Arsenic	7440-38-2	4.48	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	21.4	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/16/15	1
Chromium	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/16/15	1
Copper FJ SQL, ICS-H	7440-50-8	0.920	0.52	1.50	5	ug/l	J	6020	11/16/15	1
Cobalt F SQL-I	7440-48-4	0.673	0.26	0.500	2	ug/l	J	6020	11/16/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/16/15	1
Manganese	7439-96-5	122.	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel F SQL-I	7440-02-0	0.520	0.35	1.00	2	ug/l	J	6020	11/16/15	1
Selenium F SQL-I	7782-49-2	1.05	0.38	1.00	2	ug/l	J	6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium	7440-62-2	8.75	0.18	0.500	5	ug/l		6020	11/16/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW07-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:50

ESC Sample # : L800806-07

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride ~~FSAL-1~~ U TB-I	75-09-2	~~1.22~~ 2.50	~~1~~ 1.22	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	102.				% Rec.		8260B	11/16/15	1

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Dale Flores and Arielle Bisoglio
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8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800806-07

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-MW07-NT01

Project # : 60425210.0058AB

Collected By : Katie Abbott
Collection Date : 11/10/15 15:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	97.8				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene UMB-I	56-55-3	~~0.00606~~ 0.0250	~~0.0041~~ 0.00606	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	~~0.0148~~	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-I	91-20-3	0.0316	~~0.0196~~ 0.0816	~~0.0250~~ 0.0816	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	102.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	107.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	105.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
Benzoic acid J LCS-L	65-85-0	2.90	0.44	5.00	10	ug/l	JJ3	8270C	11/19/15	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene ONR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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ONR = do Not report

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800806-07

Site ID :

Sample ID : TU518-MW07-NT01

Project # : 60425210.0058AB

Collected By : Katie Abbott
Collection Date : 11/10/15 15:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U 1.00	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate U MB-I	84-74-2	~~0.332~~	~~0.266~~ 0.332	1.00	3	ug/l	J	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS, ~~CD~~-I	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	46.5				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	33.7				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	64.1				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	77.8				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	84.7				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	82.5				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800806-08

Site ID :

Project # : 60425210.0058AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW07-ND01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F Sal-I	7429-90-5	25.2	2 0.900	50.0 0.900	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB,CCB-I	7440-36-0	0.900	~~0.21~~	~~0.500~~	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	4.60	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	21.3	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved FJ SQL,MS-H	7440-50-8	0.814	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved F Sal-I	7440-48-4	1.05	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	155.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved F Sal-I	7440-02-0	0.553	0.35	1.00	2	ug/l	J	6020	11/17/15	1
Selenium,Dissolved FS SQL, MS-H	7782-49-2	0.893	0.38	1.00	2	ug/l	J	6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	8.45	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0645~~ 0.0800	~~0.049~~ 0.0645	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW06-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:45

ESC Sample # : L800806-09

Site ID :

Project # : 60425210.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	14900000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum F sal-1	7429-90-5	77.7	2	50.0	100	ug/l	J	6020	11/16/15	1
Antimony F sal-1	7440-36-0	0.787	0.21	0.500	2	ug/l	J	6020	11/16/15	1
Arsenic	7440-38-2	3.77	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	12.4	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/16/15	1
Chromium FJ SQL, ICS-H	7440-47-3	0.746	0.54	1.50	2	ug/l	J	6020	11/16/15	1
Copper	7440-50-8	U	0.52	1.50	5	ug/l		6020	11/16/15	1
Cobalt	7440-48-4	U	0.26	0.500	2	ug/l		6020	11/16/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/16/15	1
Manganese J DL-L	7439-96-5	31.9	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel F sal-1	7440-02-0	0.836	0.35	1.00	2	ug/l	J	6020	11/16/15	1
Selenium F sal-1	7782-49-2	0.483	0.38	1.00	2	ug/l	J	6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium F sal-1	7440-62-2	1.38	0.18	0.500	5	ug/l	J	6020	11/16/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l	J3	8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800806-09

Site ID :

Project # : 60425210.0058AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW06-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride U TB-I	75-09-2	~~1.07~~ 2.50	~~1.07~~ 1.07	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	91-20-3	U	1	2.50	5	ug/l		8260B	11/16/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	104.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800806-09

Site ID :

Project # : 60425210.0058AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW06-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	96.5				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.025	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene UMB-I	56-55-3	~~0.00644~~	~~0.0041~~ 0.00644	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	84.6				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	71.7				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	67.3				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l	J3	8270C	11/19/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l	J3	8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene ONR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800806-09

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-MW06-NT01

Project # : 60425210.0058AB

Collected By : Katie Abbott
Collection Date : 11/10/15 15:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l	J3	8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U 1.00	0.708 ~~0.803~~	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate U MB-I	84-74-2	~~0.503~~	~~0.266~~ 0.503	1.00	3	ug/l	JJ3	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l	J3	8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l	J3	8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS, D-I	51-28-5	U	3.25	5.00	10	ug/l		8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	42.2				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	35.6				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	58.1				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	72.8				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	74.6				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	77.0				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800806-10

Site ID :

Project # : 60425210.0058AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU518-MW06-ND01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	20.4	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB,CCB-I	7440-36-0	0.540	~~0.31~~ 0.540	~~0.500~~ 0.540	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved	7440-38-2	2.54	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	9.81	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved	7440-50-8	U	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt,Dissolved	7440-48-4	U	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved J DL-I	7439-96-5	31.4	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	U	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved	7782-49-2	U	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved U MB-I	7440-62-2	1.42	~~0.18~~ 1.42	~~0.500~~ 1.42	5	ug/l	J	6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0618~~ 0.0800	~~0.049~~ 0.068	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L800817
Sampling Event Dates: November 9, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Katie Abbott, URS Project Chemist
Date Completed: February 2, 2016
Peer Reviewer: Sheri Fling, URS Project Quality Assurance Manager (QAM)

The table below summarizes the data package and sample identifications discussed in this data review.

Field Identification	Sample Type	Lab Identification	Matrix	Analyses					
				VOCs	SVOCs	PAHs	Total Metals	Dissolved Metals	TDS
TU508-MW01-ND01	SA	L800817-01	Water	---	---	---	---	X	---
TU508-MW01-NT01	SA	L800817-02	Water	X	X	X	X	---	X
TU508-MW02-NT01	SA	L800817-03	Water	X	X	X	X	---	X
TU508-MW02-ND01	SA	L800817-04	Water	---	---	---	---	X	---
TU508-MW03-NT01	SA	L800817-05	Water	X	X	X	X	---	X
TU508-MW03-ND01	SA	L800817-06	Water	---	---	---	---	X	---
TU508-MW04-ND01	SA	L800817-07	Water	---	---	---	---	X	---
TU508-MW04-NT01	SA	L800817-08	Water	X	X	X	X	---	X
TU508-MW05-ND01	SA	L800817-09	Water	---	---	---	---	X	---
TU508-MW05-NT01	SA	L800817-10	Water	X	X	X	X	---	X
TU508-MW06-ND01	SA	L800817-11	Water	---	---	---	---	X	---
TU508-MW06-NT01	SA	L800817-12	Water	X	X	X	X	---	X
TU508-MW07-NT01	SA	L800817-13	Water	X	X	X	X	---	X
TU508-MW07-ND01	SA	L800817-14	Water	---	---	---	---	X	---
SS018-MW16-ND01*	SA	L800817-15	Water	---	---	---	---	X	---
SS018-MW16-NT01*	SA	L800817-16	Water	X	X	X	X^m	---	X
SS018-MW16-DD01	FD	L800817-17	Water	---	---	---	---	X	---
SS018-MW16-DT01	FD	L800817-18	Water	X	X	X	X	---	X

Sample Type: SA – Sample FD – Field Duplicate X^m - Matrix Spike/Matrix Spike Duplicate
Analyses: TDS – Total Dissolved Solids (SM2540C)
Total/Dissolved Metals – Antimony, Arsenic, Cadmium, Chromium, Cobalt, Lead, Nickel, Selenium, Silver, Thallium, Mercury, Aluminum, Barium, Beryllium, Copper, Manganese, Vanadium, Zinc (6020/7470A)
PAHs – Polynuclear Aromatic Hydrocarbons (8270C SIM)
SIM – Selective Ion Monitoring
SVOCs – Semivolatile Organic Compounds (8270C)
VOCs – Volatile Organic Compounds (8260B)
*Sample ID corrected to reflect the proper nomenclature.

The data review was conducted in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14; Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

General Overall Assessment:

_____ Data are usable without qualification.
_____ Data are usable with qualification (noted below).
__X__ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any laboratory case narrative comments concerning data qualification were addressed in the table below.

Trace level detects, reported between the method detection limit (MDL) and the reporting limit (LOQ), have been qualified as estimated (F SQL-I). All other occurrences of data qualification are covered in the following table.

Review Parameter	Criteria Met?	Comment
Chain of Custody & Sample Receipt	No	The samples were received by ESC Lab Sciences in good condition and were consistent with the accompanying chain of custody (COC). The cooler temperatures upon receipt were within the recommended ≤6 degrees Celsius (°C) temperature range. The samples were shipped to the laboratory with the volatile organic analysis (VOA) vials for the volatile organic compounds (VOCs) analysis in one cooler and the other sample containers (e.g., metals) in separate coolers. A complete signed original COC was included in each of the coolers with a footnote that stated the following: the circled analyses represent those analyses for which bottles are contained in this cooler. However, upon arrival at the laboratory, sample receiving discarded one of the two COCs submitted for each sample assuming one COC was a duplicate. As this had no impact on sample login or reporting of results, data qualification was not necessary. Trip blanks samples were included in each cooler containing samples to be analyzed for VOCs and gasoline range organics (GROs). However, upon receipt the trip blank samples and the field blank samples were logged into two data packages and therefore, not reported with the samples from the same cooler. The associated trip blanks were identified based on the field notes and qualification was only extended to results for those samples shipped in the same cooler as the trip blank. The field blanks were assessed collectively and any resultant qualification was discussed in Section 4.4 of the validation report. The laboratory incorrectly logged samples SS018-MW16-ND01 and SS018-MW16-NT01 as TU508-MW16-ND01 and TU508-MW16-NT01. The sample identifications (IDs) were corrected on the data sheets and in the electronic database to reflect the proper nomenclature.

Review Parameter	Criteria Met?	Comment
Reporting	Yes	**Revised Reports** Revised reports were required to remove 2-chloronaphthalene from the polynuclear aromatic hydrocarbon (PAH) analyte list and to correct the methyl cyclohexane results and the missing methylene chloride raw data. **Method 8260B (VOCs)** During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference spectra taken from the instrument calibration, the analyst was not seeing the improper alignment of spectra noted in the data package during his/her review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding. Due to interferences from 1,4-difluorobenzene and trichloroethene with similar retention times to methyl cyclohexane, and because these coeluting compounds also have some molecular ion overlap with methyl cyclohexane; the methyl cyclohexane result for sample TU508-MW01-NT01 was qualified as tentatively identified at an estimated concentration (NJ). **Method 8270C Semivolatile Organic Compounds (SVOCs)** The results for 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene were not reported by Method 8270C SVOCs but were reported by Method 8260B VOCs. As the detection limits (DLs), limits of detection (LODs), and limits of quantitation (LOQs) are lower by Method 8260B, further action was not necessary. The laboratory noted 4-methylphenol cannot be reported as 3 & 4-methylphenol coelute during the analysis; therefore, the analytes are reported together and 3&4-methylphenol on the data sheets and in the electronic database. **Method 6020 (Inductively Coupled Plasma Mass Spectrometer (ICPMS) Metals)** Several samples were re-analyzed for aluminum and beryllium on separate instrument. The quality control samples were digested and analyzed with all of the samples in the original analysis, and were not re-analyzed with the reanalysis; however, continuing calibration blanks (CCBs) and continuing calibration verifications (CCVs) were performed and evaluated for contamination and instrument calibration.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method Blank • Continuing Calibration Blanks	No	With the exceptions listed in Table 1, target analytes were not detected within the method or calibration blanks.

Review Parameter	Criteria Met?	Comment
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate SS018-MW16-NT01 (Total Mercury) • Total vs. Partial Analyses (Metals) • Laboratory Duplicate TU508-MW01-NT01 (TDS)	Yes	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the quality assurance project plan (QAPP) requirement of one per twenty samples. The MS/MSD recoveries and relative percent differences (RPDs) met quality control criteria. Results in the native sample greater than four times the concentration of the spike added during digestions/extractions are not considered to be a representative measure of accuracy. Further action with respect to spike recovery evaluation or qualification of data was not considered necessary. Consistent with standard operating procedure (SOP) 14, when MS/MSD issues accounted for less than 35% of the MS/MSD analyses conducted, applicable data qualification was limited to qualification of the parent sample of the affected analyte. When >35% of the MS/MSD results did not meet criteria, evaluation was extended to all associated samples. See Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation. **Total vs. Partial Analyses (Metals)** Consistent with SOP 14, results for the total analysis of a particular analyte should be greater than the results for a partial analyte of that analyte. The following criteria were used to evaluate the total versus dissolved results: • In instances where the value for a partial analysis exceed that for a total analysis and both of the results are >5xLOQ, the criterion utilized is that the two values should agree within ±30%. • In instances where the value for a partial analysis exceeds that for a total analysis and either of the results is 5xLOQ, the absolute difference between the results is compared against an evaluation criterion of 2xLOQ. The total metal sample results and associated dissolved sample results met the concentration-dependent criteria. **Laboratory Duplicate** The comparison between results of the laboratory duplicate pair met the criteria listed below. • When both the sample and duplicate values are >5xLOQ acceptable sampling and analytical precision is indicated by a relative percent difference (RPD) between the results of ≤20% for water samples (≤35% for soil samples). • Where the result for one or both analytes of the laboratory duplicate pair is <5xLOQ, satisfactory precision is indicated if the absolute difference between the laboratory duplicate results is <1xLOQ for water samples (<2xLOQ for soil samples).
Metals Only • Serial Dilution None in this package	NA	**Serial Dilution (Metals Only)** A serial dilution was not reported in association with the samples in this data package.

Review Parameter	Criteria Met?	Comment
Method Quality Control • Surrogates (VOCs, PAHs, SVOCs)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank None in this package • Field Duplicate SS018-MW16-ND01/ SS018-MW16-DD01 SS018-MW16-NT01/ SS018-MW16-DT01 • Equipment Blank None in this package • Field Blank None in this package	Yes	**Trip Blank** A trip blank sample was submitted with the coolers; it was reported and evaluated in separate data packages (L800830 and L801106). **Field Duplicate** The frequency of field duplicates met the QAPP requirement of one per twenty samples. The comparison between results of the field duplicate pair met the criteria listed below. • When both the sample and duplicate values are >5xLOQ acceptable sampling and analytical precision is indicated by an RPD between the results of ≤30% for water samples (≤50% for soil samples). • Where the result for one or both analytes of the field duplicate pair is <5xLOQ, satisfactory precision is indicated if the absolute difference between the field duplicate results is <2xLOQ for water samples (<3.5xLOQ for soil samples). Consistent with SOP 14, when field duplicate issues accounted for less than 35% of the field duplicate analyses conducted, applicable data qualification was limited to qualification of the parent sample for the affected analyte. When >35% of the field duplicate results did not meet criteria, evaluation was extended to all associated samples. See Section 4.3 of the data validation report for overall qualifiers resulting from the field duplicate evaluation. **Equipment Blank** As dedicated equipment was used to collect these samples, an equipment blank was not submitted for this sampling event. Further action was not necessary. **Field Blank** The frequency of field blanks met the QAPP requirement of one per twenty samples. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.
LODs met?	No	Due to dilutions, several dissolved and total metals results were reported as non-detect or estimated at elevated LODs. See Section 3.6 of the validation report for further discussion.
Other Parameters	Yes	Naphthalene (8260B and 8270C- PAHs) and hexachloro-1,3-butadiene and 1,2,4-trichlorobenzene (8260B and 8270C) were analyzed by multiple methods. Results were selected for reporting using the following criteria: • If both results were non-detect, the non-detect result with the lower DL was selected. • If both results were reported as detected, the higher detected result was selected for reporting. • If one result was reported as non-detect and the other result was reported as detected, the detected result was selected for reporting.

Review Parameter	Criteria Met?	Comment
Initial Calibration	Yes	**Methods 8260B VOCs & 8270C SVOCs** A minimum relative response factor (RRF) of 0.05 was used for the system performance check compounds (SPCCs) and all SPCCs met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a requirement of 15% was used. The %RSD values for all target analytes in the calibration were less than 15%. Therefore, the initial calibration met method acceptance criteria. **Method 8270C PAHs** The %RSD values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **Method 6020 (ICPMS Metals) & 7470A Mercury** The initial calibrations (ICALs) were performed in association with the samples reported in this package. The relationship between instrument response and concentration was established with a blank and at least five standards. The calibrations were verified with the analysis of an initial calibration verification (ICV) standard. All metals were recovered within the method acceptance range of 90-110%. **Total Dissolved Solids (TDS)** ICALs are not required per the method for TDS.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** With the exceptions listed in Table 2, the percent differences (%Ds) for all CCCs in the ICVs and continuing calibrations (CCALs) were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 20%. **Methods 8270C SVOCs & 8270C PAHs** With the exceptions listed in Table 2, the %D values for all target analytes in the calibration were less than 20%. **Method 6020 (ICPMS Metals)** Calibration verification analyses were conducted at the proper frequency. All metals were recovered within the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2 low level acceptance range of 80-120% and the method medium/high acceptance range of 90-110%. **Method 7470A Mercury** Calibration verification analyses were conducted at the proper frequency. All results were recovered within the DoD QSM version 4.2 acceptance range of 90-110%. A low level calibration verification is not required per DoD QSM version 4.2; therefore, laboratory limits were used. **TDS** Calibration verifications are not required for TDS.

Review Parameter	Criteria Met?	Comment
Interference Check Standard (Metals Only)	No	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 80-120% in the ICS AB solution. With the exceptions listed in Table 3, interferent elements were not present in the samples at concentrations greater than those in the ICSs. The interferent elements aluminum, calcium, iron, potassium, magnesium, molydenum, sodium, and/or titanium were present in most samples in this data package at concentrations greater than or equal to those in the ICSs. As such, these samples were evaluated for positive and negative biases suggested by the ICS A. Data qualification was issued if the absolute value of the ICS A result was greater than the DL and it suggested a positive or negative bias which accounted for more than 25% of associated sample results or LODs. (Note: The ICS A solution only contains the interferent elements aluminum, calcium, iron, and magnesium so any positive or negative result for other analytes is inferred to be a bias potentially caused by one or more of the interferent elements present). Table 3 summarizes the resultant data qualification on the basis of the ICS results.
Internal Standard (VOCs/PAHs/Metals (6020))	Yes	Recoveries for the internal standards in field samples were within the applicable acceptance limits. Therefore, data qualification based on internal standards was not necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate	No	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. With the exceptions listed in Table 4, all of the LCS recoveries and LCS/LCSD RPDs were within the QAPP acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Package Completeness	No	With the exception of the benzoic acid results for all samples, which were qualified as unusable due to LCS/LCSD recoveries <10%, the results are usable as qualified for the project objective. The data are 99% complete.

> - Greater Than
< - Less Than
≤ - Less Than or Equal to
± - Plus or Minus
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCB – Continuing Calibration Blank
CCCs – Calibration Check Compounds
CCV – Continuing Calibration Verification
COC – Chain of Custody
DLs – Detection Limits
DoD – Department of Defense
GRO – Gasoline Range Organics
ICAL – Initial Calibration
ICPMS - Inductively Coupled Plasma Mass Spectrometry
ICS – Interference Check Standard
ICV – Initial Calibration Verification
IDs - Identifications
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
LOQ – Limit of Quantitation
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
NJ – Tentatively Identified
PAHs – Polynuclear Aromatic Hydrocarbons
QAPP – Quality Assurance Project Plan
QSM – Quality Systems Manual
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
SVOCs – Semivolatile Organic Compounds
TDS – Total Dissolved Solids
VOA – Volatile Organic Analysis
VOCs – Volatile Organic Compounds

Table 1: Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
Total Metals			
MB Batch WG829017 SS018-MW16-NT01 SS018-MW16-DT01	Mercury	0.0950 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
MB Batch WG829003 TU508-MW01-NT01 TU508-MW02-NT01 TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01	Aluminum	13.8 µg/L	
	Barium	1.37 µg/L	None. The associated results were reported at concentrations >5x the concentration of the blank contamination.
CCB WG829003 TU508-MW01-NT01 TU508-MW02-NT01 TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01	Aluminum	2.4 µg/L	
CCB WG829003 TU508-MW01-NT01 TU508-MW02-NT01 TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01	Antimony	0.281 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
CCB WG829003 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01	Aluminum	6.22 µg/L	
	Antimony	0.254 µg/L	The associated antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
Dissolved Metals			
MB Batch WG829716 TU508-MW01-ND01 TU508-MW02-ND01 TU508-MW03-ND01 TU508-MW04-ND01 TU508-MW05-ND01 TU508-MW06-ND01 TU508-MW07-ND01 SS018-MW16-ND01 SS018-MW16-DD01	Dissolved Mercury	0.0712 µg/L	The associated dissolved mercury results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).

Associated Samples	Analyte	Concentration	Qualification
MB Batch WG829005 TU508-MW01-ND01 TU508-MW02-ND01 TU508-MW03-ND01 TU508-MW04-ND01 TU508-MW05-ND01 TU508-MW06-ND01 TU508-MW07-ND01 SS018-MW16-ND01 SS018-MW16-DD01	Dissolved Aluminum	3.06 µg/L	None. The associated dissolved aluminum results were reported at concentrations >5x the concentration of the blank contamination.
	Dissolved Antimony	0.280 µg/L	The associated dissolved antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Dissolved Barium	0.415 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Dissolved Lead	0.299 µg/L	
	Dissolved Vanadium	0.468 µg/L	The associated dissolved vanadium result for sample TU508-MW01-ND01 was reported at a concentration <5x the concentration of the blank contamination and was qualified as non-detect (U MB-I).
CCB WG829005 TU508-MW01-ND01 TU508-MW02-ND01 TU508-MW03-ND01 TU508-MW04-ND01 TU508-MW05-ND01 TU508-MW06-ND01	Dissolved Antimony	0.245 µg/L	The associated dissolved antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
CCB WG829005 TU508-MW01-ND01 TU508-MW02-ND01 TU508-MW03-ND01 TU508-MW04-ND01 TU508-MW05-ND01 TU508-MW06-ND01 TU508-MW07-ND01 SS018-MW16-ND01 SS018-MW16-DD01	Dissolved Manganese	0.255 µg/L	None. The associated dissolved manganese results were reported at concentrations >5x the concentration of the blank contamination.
	Dissolved Antimony	0.260 µg/L	The associated dissolved antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
CCB WG829005 TU508-MW07-ND01 SS018-MW16-ND01 SS018-MW16-DD01			
SVOCs			
MB Batch WG829904 TU508-MW01-NT01 TU508-MW02-NT01 TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01	Di-n-butyl Phthalate	0.384 µg/L	The associated di-n-butyl phthalate results reported at concentrations <10x the concentration of the blank contamination were qualified as non-detect (U MB-I).

Associated Samples	Analyte	Concentration	Qualification
PAHs			
MB Batch WG829386 TU508-MW01-NT01 TU508-MW02-NT01 TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01	1-Methylnaphthalene	0.0100 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	2-Methylnaphthalene	0.0113 µg/L	
	Benzo(a)anthracene	0.0150 µg/L	
	Benzo(b)fluoranthene	0.0109 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Benzo(g,h,i)perylene	0.0126 µg/L	
	Chrysene	0.0113 µg/L	
	Dibenz(a,h)anthracene	0.00979 µg/L	
	Fluorene	0.00940 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Naphthalene	0.0374 µg/L	
	Phenanthrene	0.0136 µg/L	

> - Greater Than
< - Less Than
µg/L – Micrograms per Liter
CCB – Continuing Calibration Blank
I – Indeterminate Bias
MB – Method Blank
PAHs – Polynuclear Aromatic Hydrocarbons
SVOCs –Semivolatile Organic Compounds
U – Non-detect

Table 2: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
VOCs			
TU508-MW01-NT01 TU508-MW02-NT01 TU508-MW03-NT01	Bromomethane	+39.9 (±20)	As the potential bias was considered to be high, and the associated samples were reported as non-detect, data qualification was not considered necessary.
	2-Butanone	+26.8 (±20)	
	4-Methyl-2-pentanone	+23.2 (±20)	
TU508-MW05-NT01 TU508-MW06-NT01 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01	Bromomethane	-36.2 (±20)	As the potential bias was considered to be low, the associated bromomethane results were qualified as estimated (UJ CCAL-L).
	2-Butanone	+26.4 (±20)	As the potential bias was considered to be high, and the associated 2-butanone sample results were reported as non-detect, data qualification was not considered necessary.
TU508-MW04-NT01	4-Methyl-2-pentanone	-22.1 (±20)	As the potential bias was considered to be low, the associated 4-methyl-2-pentanone result was qualified as estimated (UJ CCAL-L).
SVOCs			
TU508-MW01-NT01 TU508-MW02-NT01 TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01	n-Nitrosodimethylamine	+54.3 (±20)	As the potential bias was considered to be high, and the associated samples were reported as non-detect, data qualification was not considered necessary.
	Bis(2-chloroethyl)ether	+30.2 (±20)	
	3&4-Methyl Phenol	-49.6 (±20)	As the potential bias was considered to be low, the associated 3&4-methyl phenol results were qualified as estimated (UJ CCAL-L).

± - Plus or minus
%D – Percent Difference
CCAL – Continuing Calibration
L – Low Bias
SVOCs – Semivolatile Organic Compounds
UJ – Estimated
VOCs – Volatile Organic Compounds

Table 3: ICS Outliers and Resultant Data Qualification

Interferent Element	Analyte	ICS A (µg/L)	DL (µg/L)	Qualified Samples	Qualification
Calcium, Magnesium	Total Chromium	1.2	0.54	TU508-MW07-NT01	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
Calcium, Magnesium, Sodium				TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01	
	Total Copper	0.6	0.52	TU508-MW02-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01 SS018-MW16-NT01 SS018-MW16-DT01	
	Total Zinc	2.7	2.54	TU508-MW01-NT01	
	Dissolved Chromium	1.2	0.54	TU508-MW01-ND01 TU508-MW03-ND01 TU508-MW04-ND01	

µg/L – Micrograms per Liter
ICS – Interference Check Standard
DL – Detection Limit
J - Estimated
H – High Bias

Table 4: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
VOCs				
LCS WG829391 TU508-MW04-ND01	1,2-Dichlorobenzene	**121**/111 (70-120)	8.62 (30)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.
SVOCs				
LCS WG829904 TU508-MW01-NT01 TU508-MW02-NT01 TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01	2,4-Dinitrophenol	37.4/61.8 (15-140)	**49.2** (30)	As the RPD was outside of control limits, the associated results were qualified as estimated (J LCS-I).
	4-Nitroaniline	**134/138** (32-120)	2.86 (30)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.
	Benzoic Acid	**6.11**/11.1 (10-125)	**58.1** (30)	As the RPD was outside of control limits, and the percent recovery was <10%, the associated non-detect benzoic acid results were qualified as unusable (R).

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
PAHs				
LCS WG829386 TU508-MW01-NT01 TU508-MW02-NT01 TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01	Acenaphthene	103/**111** (45-110)	7.09 (20)	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J LCS-H).
	Acenaphthylene	105/**112** (50-105)	5.72 (20)	
	Anthracene	**116/121** (55-110)	4.18 (20)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.
	Benzo(a)anthracene	**116/121** (55-110)	4.11 (20)	
	Benzo(a)pyrene	**122/126** (55-110)	3.08 (20)	
	Benzo(b)fluoranthene	117/**130** (45-120)	10.4 (20)	
	Benzo(g,h,i)perylene	123/**132** (40-125)	6.99 (20)	
	Benzo(k)fluoranthene	**128**/123 (45-125)	3.96 (20)	
	Chrysene	**121/126** (55-110)	4.13 (20)	
	Fluoranthene	**119/124** (55-115)	3.03 (20)	
	Fluorene	108/**114** (50-110)	4.26 (20)	
	Indeno(1,2,3-c,d)pyrene	123/**129** (45-125)	5.85 (20)	
	Phenanthrene	115/**118** (50-115)	3 (20)	

% - Percent
%R – Percent Recoveries
< - Less Than
H – High Bias
I – Indeterminate Bias
J – Estimated
LCS – Laboratory Control Sample
PAHs – Polynuclear Aromatic Hydrocarbons
R - Unusable
RPD – Relative Percent Difference
SVOCs – Semivolatile Organic Compounds
VOCs – Volatile Organic Compounds
Bold indicates a recovery outside of acceptance limits.

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW01-ND01

Collected By : Katie Abbott
Collection Date : 11/09/15 15:25

ESC Sample # : L800817-01

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	26.6	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved	7440-36-0	U	0.21	0.500	2	ug/l		6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	7.62	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	26.0	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved FJ SQL, ICS-H	7440-47-3	0.758	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper,Dissolved FJ SQL, MS-H	7440-50-8	1.71	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved	7440-48-4	U	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	180.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved F SQL-I	7440-02-0	1.63	0.35	1.00	2	ug/l	J	6020	11/17/15	1
Selenium,Dissolved	7782-49-2	U	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved U MB-I	7440-62-2	1.39	~~0.18~~ 1.39	~~0.500~~ 1.39	5	ug/l	J	6020	11/17/15	1
Zinc,Dissolved F SQL-I	7440-66-6	2.89	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0658~~ 0.0806	~~0.049~~ 0.0658	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-02

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU508-MW01-NT01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 15:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	4220000	2820	5000	10000	ug/l		2540 C-	11/16/15	1
Aluminum U MB-I	7429-90-5	~~31.1~~ 50.0	~~2~~ 31.1	50.0	100	ug/l	J	6020	11/16/15	1
Antimony	7440-36-0	U	0.21	0.500	2	ug/l		6020	11/16/15	1
Arsenic	7440-38-2	7.97	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	25.8	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/16/15	1
Chromium	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/16/15	1
Copper	7440-50-8	U	0.52	1.50	5	ug/l		6020	11/16/15	1
Cobalt	7440-48-4	U	0.26	0.500	2	ug/l		6020	11/16/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/16/15	1
Manganese	7439-96-5	187.	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel F SQL-I	7440-02-0	0.711	0.35	1.00	2	ug/l	J	6020	11/16/15	1
Selenium	7782-49-2	U	0.38	1.00	2	ug/l		6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium F SQL-I	7440-62-2	0.966	0.18	0.500	5	ug/l	J	6020	11/16/15	1
Zinc F J SQL, ICS-H	7440-66-6	2.71	2.56	5.00	25	ug/l	J	6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	1.13	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-02

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW01-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 15:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene F Sal-I	541-73-1	0.315	0.22	0.500	1	ug/l	J	8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	102.	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	3.50	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U 2.50	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride V TB-I	75-09-2	~~1.34~~	~~I~~ 1.34	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane ~~F Sal-I~~ FNJ 10,30,31	108-87-2	0.527	0.38	0.500	1	ug/l	J	8260B	11/16/15	1
Naphthalene ONR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	2.50	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/16/15	1

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February 03, 2016

ESC Sample # : L800817-02

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Sample ID : TU508-MW01-NT01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 15:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	97.0				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene FJ SQL, LCS-H	83-32-9	0.0203	0.01	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U 0.0250	0.012	0.00698 0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-1	56-55-3	~~0.00698~~	~~0.0041~~	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U 0.0250	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene U MB-1	86-73-7	~~0.00853~~	~~0.0085~~ 0.00853	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-1	91-20-3	0.110	~~0.0198~~ 0.00	~~0.0250~~ 0.110	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	95.7				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	108.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	105.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U 1.00	0.709 0.352	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate U MB-1	84-74-2	~~0.352~~	~~0.266~~	1.00	3	ug/l	J	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS, D-1	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	52.4				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	37.9				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	74.4				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	75.8				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	84.6				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	86.1				% Rec.		8270C	11/19/15	1

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DNR: Do Not Report

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 15:30

ESC Sample # : L800817-03

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	5570000	2820	5000	10000	ug/l		2540 C-	11/16/15	1
Aluminum U MB-1	7429-90-5	~~31.0~~ 50.0	~~2~~ 31.0	50.0	100	ug/l	J	6020	11/16/15	1
Antimony U ECB-1	7440-36-0	0.378	~~0.21~~ 0.378	0.500	2	ug/l	J	6020	11/16/15	1
Arsenic	7440-38-2	17.1	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	22.5	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/16/15	1
Chromium	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/16/15	1
Copper FJ SQL, ICS-H	7440-50-8	0.666	0.52	1.50	5	ug/l	J	6020	11/16/15	1
Cobalt F SQL-I	7440-48-4	1.98	0.26	0.500	2	ug/l	J	6020	11/16/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/16/15	1
Manganese	7439-96-5	313.	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel	7440-02-0	2.69	0.35	1.00	2	ug/l		6020	11/16/15	1
Selenium	7782-49-2	3.34	0.38	1.00	2	ug/l		6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium	7440-62-2	81.6	0.18	0.500	5	ug/l		6020	11/16/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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February 03, 2016

ESC Sample # : L800817-03

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Description : Holloman AFB

Site ID :

Sample ID : TU508-MW02-NT01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 15:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane F Sal-I	75-34-3	0.438	0.259	0.500	1	ug/l	J	8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	74.4	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	1.69	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride U TB-I	75-09-2	~~1.30~~ 2.50	~~1~~ 1.30	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene ONR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene F Sal-I	127-18-4	0.953	0.372	0.500	1	ug/l	J	8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	14.9	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	1.10	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/16/15	1

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Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	97.1				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene FJ, SOL, LCS, MS-H	208-96-8	0.0126	0.012	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)anthracene U MB-1	56-55-3	~~0.00594~~ 0.00510	~~0.0041~~ 0.00594	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	104.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	107.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	108.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 15:30

ESC Sample # : L800817-03

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate U MB-1	84-74-2	~~0.330~~ 1.00	~~0.266~~ 0.330	1.00	3	ug/l	J	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate F SAL-1	117-84-0	0.361	0.278	1.00	3	ug/l	J	8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol V J LCS 10-1	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	52.5				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	39.2				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	73.1				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	82.6				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	112.				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	93.8				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-04

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW02-ND01

Collected By : Katie Abbott
Collection Date : 11/09/15 15:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F sal-I	7429-90-5	28.3	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB, CCB-I	7440-36-0	~~0.255~~ 0.500	~~0.21~~ 0.255	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	17.4	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	22.1	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved FJ sal, MS-H	7440-50-8	2.00	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved F sal-I	7440-48-4	1.98	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	302.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	2.92	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	3.49	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	81.5	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB	7439-97-6	~~0.0622~~ 0.0800	~~0.049~~ 0.0622	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

ESC Sample # : L800817-05

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	9880000	2820	5000	10000	ug/l		2540 C-	11/16/15	1
Aluminum U MB-I	7429-90-5	~~16.3~~ 50.0	~~2~~ 16.3	50.0	100	ug/l	J	6020	11/16/15	1
Antimony U CCB-I	7440-36-0	~~0.205~~ 0.500	~~0.21~~ 0.365	0.500	2	ug/l	J	6020	11/16/15	1
Arsenic	7440-38-2	22.5	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	13.7	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/16/15	1
Chromium FJ Sal, IC-H	7440-47-3	0.961	0.54	1.50	2	ug/l	J	6020	11/16/15	1
Copper	7440-50-8	U	0.52	1.50	5	ug/l		6020	11/16/15	1
Cobalt	7440-48-4	U	0.26	0.500	2	ug/l		6020	11/16/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/16/15	1
Manganese	7439-96-5	5.55	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel F Sal-I	7440-02-0	1.49	0.35	1.00	2	ug/l	J	6020	11/16/15	1
Selenium	7782-49-2	6.75	0.38	1.00	2	ug/l		6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium	7440-62-2	120.	0.18	0.500	5	ug/l		6020	11/16/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform ~~F Sal-I~~ U FR-I	67-66-3	~~0.430~~ 2.50	~~0.324~~ 0.430	2.50	5	ug/l	J	8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-05

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	1.41	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	14.2	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride U TB-1	75-09-2	~~1.34~~ 2.50	~~1~~ 1.34	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	102.				% Rec.		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-05

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU508-MW03-NT01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	97.2				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-2	56-55-3	~~0.00603~~ 0.0250	~~0.0041~~ 0.00603	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-2	91-20-3	~~0.0232~~ 0.0250	~~0.0196~~ 0.0232	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	103.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	108.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	105.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
~~Benzoic acid R~~	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
~~Hexachloro-1,3-butadiene DNR~~	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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DNR: do not report

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

ESC Sample # : L800817-05

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate U MB-1	84-74-2	~~0.337~~ 1.00	~~0.266~~ 0.337	1.00	3	ug/l	J	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol VJ LCS, D-1	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol VJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	38.4				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	32.3				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	48.8				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	73.5				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	67.5				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	81.8				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-06

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW03-ND01

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	33.8	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB, CCB-I	7440-36-0	~~0.277~~ 0.500	~~0.21~~ 0.277	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	22.9	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	13.2	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved F J SQL, MS-H	7440-47-3	0.589	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper,Dissolved F J SQL, MS-H	7440-50-8	0.666	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved	7440-48-4	U	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved F SQL-I	7439-96-5	4.42	0.25	0.500	5	ug/l	J	6020	11/17/15	1
Nickel,Dissolved F SQL-I	7440-02-0	1.53	0.35	1.00	2	ug/l	J	6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	6.65	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	118.	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved F SQL-I	7440-66-6	3.10	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0878~~ ok 0.0878	~~0.049~~ 0.0878	~~0.0800~~ 0.0878	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
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Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-07

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW04-ND01

Collected By : Katie Abbott
Collection Date : 11/09/15 14:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	25.5	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB,CCB-I	7440-36-0	~~0.408~~ 0.500	~~0.21~~ 0.408	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	27.0	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	21.2	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved FJ SQL, MS-H	7440-47-3	0.796	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper,Dissolved FJ SQL, MS-H	7440-50-8	1.11	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved F SQL-I	7440-48-4	0.356	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	23.2	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved F SQL-I	7440-02-0	1.47	0.35	1.00	2	ug/l	J	6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	4.14	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	140.	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB	7439-97-6	~~0.0702~~ 0.0800	~~0.049~~ 0.0702	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
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February 03, 2016

ESC Sample # : L800817-08

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 14:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	7520000	2820	5000	10000	ug/l		2540 C-	11/16/15	1
Aluminum U MA-I	7429-90-5	~~19.6~~ 50.0	~~2~~ 19.6	50.0	100	ug/l	J	6020	11/16/15	1
Antimony U CCB-I	7440-36-0	~~0.311~~ 0.500	~~0.21~~ 0.311	0.500	2	ug/l	J	6020	11/16/15	1
Arsenic	7440-38-2	25.2	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	22.8	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/16/15	1
Chromium FJ SQL, IC-H	7440-47-3	0.776	0.54	1.50	2	ug/l	J	6020	11/16/15	1
Copper FJ SQL, IC-H	7440-50-8	1.06	0.52	1.50	5	ug/l	J	6020	11/16/15	1
Cobalt	7440-48-4	U	0.26	0.500	2	ug/l		6020	11/16/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/16/15	1
Manganese	7439-96-5	25.8	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel F SQL-I	7440-02-0	1.33	0.35	1.00	2	ug/l	J	6020	11/16/15	1
Selenium	7782-49-2	3.72	0.38	1.00	2	ug/l		6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium	7440-62-2	133.	0.18	0.500	5	ug/l		6020	11/16/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800817-08

Site ID :

Sample ID : TU508-MW04-NT01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 14:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS,D-I	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	48.6				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	34.4				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	70.1				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	77.7				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	99.7				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	81.7				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-08

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 14:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	93.8				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-1	56-55-3	~~0.00674~~ 0.0250	~~0.0041~~ 0.00674	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-1	91-20-3	~~0.0228~~ 0.0250	~~0.0198~~ 0.0228	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene U MB-1	85-01-8	0.0254	~~0.0082~~ 0.0254	~~0.0250~~ 0.0254	0.05	ug/l	J	8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	106.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	112.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	111.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 14:15

ESC Sample # : L800817-08

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride U TB-I	75-09-2	~~1.40~~ 2.50	~~1~~ 1.40	2.50	5	ug/l	J	8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) U JCCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	98.4				% Rec.		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-09

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW05-ND01

Collected By : Katie Abbott
Collection Date : 11/09/15 16:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	25.0	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB, CCB-I	7440-36-0	~~0.273~~ 0.500	~~0.21~~ 0.173	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	48.2	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	28.4	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved F J SQL, MS-H	7440-50-8	0.777	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved	7440-48-4	2.89	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	667.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	3.38	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	3.89	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	13.2	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0737~~ 0.0800	~~0.049~~ 0.0737	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW05-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 16:30

ESC Sample # : L800817-10

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	19000000	2820	5000	10000	ug/l		2540 C-	11/16/15	1
Aluminum U MQ-1	7429-90-5	~~32.8~~ 50.0	~~2~~ 32.0	50.0	100	ug/l	J	6020	11/16/15	1
Antimony U CCB-1	7440-36-0	~~0.318~~	~~0.21~~ 0.318	0.500	2	ug/l	J	6020	11/16/15	1
Arsenic	7440-38-2	49.3	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	29.8	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/16/15	1
Chromium FJ SQL, ZU-H	7440-47-3	0.561	0.54	1.50	2	ug/l	J	6020	11/16/15	1
Copper FJ SQL, ZU-H	7440-50-8	0.598	0.52	1.50	5	ug/l	J	6020	11/16/15	1
Cobalt	7440-48-4	2.99	0.26	0.500	2	ug/l		6020	11/16/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/16/15	1
Manganese	7439-96-5	717.	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel	7440-02-0	2.78	0.35	1.00	2	ug/l		6020	11/16/15	1
Selenium	7782-49-2	3.72	0.38	1.00	2	ug/l		6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium	7440-62-2	12.9	0.18	0.500	5	ug/l		6020	11/16/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene F SQL-1	71-43-2	0.750	0.331	0.500	1	ug/l	J	8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane UJ CCAL-L	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene F SQL-1	98-06-6	0.708	0.399	0.500	1	ug/l	J	8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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ESC Sample # : L800817-10

Sample ID : TU508-MW05-NT01

Site ID :

Project # : 60425210.0057AB

Collected By : Katie Abbott
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Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane F SQL-1	75-34-3	0.765	0.259	0.500	1	ug/l	J	8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	3.77	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	34.7	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene F SQL-1	156-60-5	0.723	0.396	0.500	1	ug/l	J	8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride V TB-1	75-09-2	~~1.46~~ 2.50	~~1.46~~ 1.46	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether F SQL-1	1634-04-4	0.959	0.367	0.500	1	ug/l	J	8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene ONR	91-20-3	U	1	2.50	5	ug/l		8260B	11/16/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	1.93	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/16/15	1

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4-Bromofluorobenzene	460-00-4	97.1				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene J LCS-H	83-32-9	0.0956	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene FJ SQL LCS, MS-H	208-96-8	0.0317	0.012	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)anthracene U MB-1	56-55-3	~~0.00621~~ 0.0250	~~0.0041~~ 0.00621	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene U MB-1	86-73-7	~~0.0434~~ 0.0434	~~0.0085~~ 0.0434	~~0.0250~~ 0.0434	0.05	ug/l	J	8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	0.518	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene U MB-1	85-01-8	~~0.0169~~ 0.0250	~~0.0082~~ 0.0169	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene U MB-1	90-12-0	0.0487	~~0.00434~~ 0.0487	~~0.0250~~ 0.0487	0.25	ug/l	J	8270C-S	11/17/15	1
2-Methylnaphthalene U MB-1	91-57-6	~~0.0237~~ 0.0250	~~0.00902~~ 0.0237	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	96.1				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	104.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	109.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
~~Benzoic acid R~~	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	~~1~~
Dibenzofuran F SQL-1	132-64-9	0.831	0.338	5.00	10	ug/l	J	8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
~~Hexachloro-1,3-butadiene DNR~~	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	120-82-1	U	0.355	5.00	10	ug/l		8270C	11/19/15	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS, D-I	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	50.7				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	34.8				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	68.8				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	73.1				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	92.9				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	78.2				% Rec.		8270C	11/19/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-11

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW06-ND01

Collected By : Katie Abbott
Collection Date : 11/09/15 10:22

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	62.6	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB,CCB-I	7440-36-0	0.514	~~0.41~~ 0.514	~~0.500~~ 0.514	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	12.4	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	27.4	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved F J SQL, MS-H	7440-50-8	0.890	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved	7440-48-4	4.34	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead,Dissolved F SQL-I	7439-92-1	3.20	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese,Dissolved	7439-96-5	1210	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	8.02	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	2.45	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	62.5	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0747~~ 0.0800	~~0.049~~ 0.0747	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW06-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 10:22

ESC Sample # : L800817-12

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	9080000	2820	5000	10000	ug/l		2540 C-	11/16/15	1
Aluminum U MB-1	7429-90-5	~~15.0~~ 50.0	~~1.370~~ 170	50.0	100	ug/l	J	6020	11/16/15	1
Antimony U CCB-1	7440-36-0	~~0.358~~	~~0.21~~ 0.358	0.500	2	ug/l	J	6020	11/16/15	1
Arsenic	7440-38-2	11.2	0.25	0.500	2	ug/l		6020	11/16/15	1
Barium	7440-39-3	31.2	0.36	1.00	5	ug/l		6020	11/16/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/16/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/16/15	1
Chromium FJ SQL, ICS-H	7440-47-3	0.604	0.54	1.50	2	ug/l	J	6020	11/16/15	1
Copper FJ SQL, ICS-H	7440-50-8	1.04	0.52	1.50	5	ug/l	J	6020	11/16/15	1
Cobalt	7440-48-4	3.71	0.26	0.500	2	ug/l		6020	11/16/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/16/15	1
Manganese	7439-96-5	1100	0.25	0.500	5	ug/l		6020	11/16/15	1
Nickel	7440-02-0	7.28	0.35	1.00	2	ug/l		6020	11/16/15	1
Selenium	7782-49-2	2.14	0.38	1.00	2	ug/l		6020	11/16/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/16/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/16/15	1
Vanadium	7440-62-2	57.9	0.18	0.500	5	ug/l		6020	11/16/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/16/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane UJ CCAL-L	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-12

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU508-MW06-NT01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 10:22

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	2.03	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	4.56	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	8.21	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride U TB-1	75-09-2	~~1.33~~ 1.50	~~1~~ 1.33	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	1.68	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	91-20-3	U	1	2.50	5	ug/l		8260B	11/16/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	13.4	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	11.5	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	101.				% Rec.		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-12

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU508-MW06-NT01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 10:22

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	96.7				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-1	56-55-3	~~0.00646~~ 0.0250	~~0.0041~~ 0.00646	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-1	91-20-3	0.0460	~~0.0198~~ 0.0460	~~0.0250~~ 0.0460	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	102.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	107.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	107.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW06-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 10:22

ESC Sample # : L800817-12

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate U MB-1	84-74-2	~~0.323~~	~~0.266~~ 0.232	1.00	3	ug/l	J	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene ONR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS,D-1	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	47.4				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	34.0				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	62.0				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	75.6				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	107.				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	83.3				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW07-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 13:45

ESC Sample # : L800817-13

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	3720000	2820	5000	10000	ug/l		2540 C-	11/16/15	1
Aluminum U MB, CCB-1	7429-90-5	~~21.0~~ 50.0	~~2~~ 21.0	50.0	100	ug/l	J	6020	11/17/15	1
Antimony U CCB-1	7440-36-0	~~0.336~~ ~~0.900~~	~~0.21~~ 0.330	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic	7440-38-2	78.2	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium	7440-39-3	31.3	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium F J Sal, ICS-H	7440-47-3	0.621	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper	7440-50-8	U	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt	7440-48-4	3.75	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/17/15	1
Manganese	7439-96-5	616.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	3.97	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium	7782-49-2	U	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/17/15	1
Vanadium F Sal-1	7440-62-2	1.81	0.18	0.500	5	ug/l	J	6020	11/17/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/17/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane U J CCAL-L	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-13

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU508-MW07-NT01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 13:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	1.35	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	7.04	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride U TB-7	75-09-2	~~1.25~~ 2.50	~~1~~ 1.25	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene	127-18-4	1.15	0.372	0.500	1	ug/l		8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	5.76	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	101.				% Rec.		8260B	11/16/15	1

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REPORT OF ANALYSIS

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URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW07-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 13:45

ESC Sample # : L800817-13

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	97.0				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene F J SQL, LCS, MS-H	208-96-8	0.0227	0.012	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)anthracene U MB-1	56-55-3	~~0.00639~~	~~0.0041~~ 0.0014	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene F SQL-1	91-20-3	0.191	0.0198	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene F SQL-1	129-00-0	0.0184	0.0117	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
1-Methylnaphthalene U MB-1	90-12-0	~~0.0102~~ 0.0250	~~0.00921~~ 0.0212	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
2-Methylnaphthalene U MB-1	91-57-6	~~0.0145~~ 0.0250	~~0.00902~~ 0.0145	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	114.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	105.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	107.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800817-13

Site ID :

Sample ID : TU508-MW07-NT01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 13:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate U MB-1	84-74-2	~~0.475~~ 1.00	~~0.266~~ 0.475	1.00	3	ug/l	J	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS,D-1	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	26.1				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	22.4				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	32.4				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	56.7				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	86.5				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	83.7				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-14

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU508-MW07-ND01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 13:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F sal-I	7429-90-5	25.3	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB, CCB-I	7440-36-0	~~0.398~~ 0.510	~~0.21~~ 0.398	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	64.6	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	31.3	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved	7440-50-8	U	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt,Dissolved	7440-48-4	3.32	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead,Dissolved F sal-I	7439-92-1	3.47	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese,Dissolved	7439-96-5	629.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	4.65	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved	7782-49-2	U	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved F J sal, MS-H	7440-62-2	2.62	0.18	0.500	5	ug/l	J	6020	11/17/15	1
Zinc,Dissolved F sal-I	7440-66-6	3.55	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0714~~ 0.0800	~~0.048~~ 0.0714	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
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8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-15

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : SS018 ~~TU508~~-MW16-ND01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	35.4	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB, CCB-I	7440-36-0	~~0.482~~ 11.500	~~0.32~~ 0.482	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	29.8	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	20.5	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved F J SQL, MS-H	7440-50-8	1.09	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved F SQL-I	7440-48-4	0.986	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved F SQL-I	7439-92-1	3.01	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese,Dissolved	7439-96-5	319.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	3.59	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	5.91	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	116.	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0736~~ 0.0800	~~0.049~~ 0.0736	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-16

Date Received : November 13, 2015
Description : Holloman AFB
Sample ID : ~~TU508~~ SS018-MW16-NT01

Site ID :

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	16600000	2820	5000	10000	ug/l		2540 C-	11/16/15	1
Aluminum U MB-7	7429-90-5	~~36.8~~ 50.0	~~2.8~~ 3.68	50.0	100	ug/l	J	6020	11/17/15	1
Antimony U CCB-7	7440-36-0	~~0.406~~ 0.500	~~0.21~~ 0.406	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic	7440-38-2	31.0	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium	7440-39-3	21.2	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper F J SQL J 7(5-H	7440-50-8	1.10	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt F SQL-7	7440-48-4	1.09	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/17/15	1
Manganese	7439-96-5	347.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	3.86	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium	7782-49-2	6.30	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/17/15	1
Vanadium	7440-62-2	118.	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB-1	7439-97-6	~~0.0738~~ 0.0800	~~0.049~~ 0.0739	0.0800	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/16/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/16/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/16/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/16/15	1
Bromomethane U J CCAL-L	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/16/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/16/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/16/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/16/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/16/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/16/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/16/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/16/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/16/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/16/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/16/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/16/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/16/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW16-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

ESC Sample # : L800817-16

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/16/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/16/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/16/15	1
1,1-Dichloroethane	75-34-3	1.72	0.259	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloroethene	75-35-4	20.6	0.398	0.500	1	ug/l		8260B	11/16/15	1
cis-1,2-Dichloroethene	156-59-2	106.	0.26	0.500	1	ug/l		8260B	11/16/15	1
trans-1,2-Dichloroethene	156-60-5	3.00	0.396	0.500	1	ug/l		8260B	11/16/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/16/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/16/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/16/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/16/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/16/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/16/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/16/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/16/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/16/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/16/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/16/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/16/15	1
Methylene Chloride V TB-1	75-09-2	~~1.12~~ 2.50	~~1~~ 1.12	2.50	5	ug/l	J	8260B	11/16/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/16/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/16/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/16/15	1
Naphthalene ONR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/16/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/16/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/16/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/16/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/16/15	1
Tetrachloroethene F SQL-1	127-18-4	0.688	0.372	0.500	1	ug/l	J	8260B	11/16/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/16/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/16/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/16/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/16/15	1
Trichloroethene	79-01-6	7.42	0.398	0.500	1	ug/l	J4	8260B	11/16/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/16/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/16/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/16/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/16/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/16/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/16/15	1
Vinyl chloride F SQL-1	75-01-4	0.617	0.259	0.500	1	ug/l	J	8260B	11/16/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	11/16/15	1
Dibromofluoromethane	1868-53-7	106.				% Rec.		8260B	11/16/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW16-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

ESC Sample # : L800817-16

Site ID :

Project # : 60425210.0057AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	97.1				% Rec.		8260B	11/16/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-1	56-55-3	~~0.00570~~ 0.0250	~~0.0041~~ 0.00570	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-1	91-20-3	0.0322	~~0.0148~~ 0.0322	~~0.0250~~ 0.0322	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	102.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	106.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	109.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-16

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU508-MW16-NT01

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS,D-1	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-1	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	46.4				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	33.1				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	61.3				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	62.7				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	86.1				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	71.8				% Rec.		8270C	11/19/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-17

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : SS018-MW16-DD01

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	26.8	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB, LCB-I	7440-36-0	~~0.489~~ 0.500	~~0.22~~ 0.429	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	28.6	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	19.8	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved FJ SQL, MS-H	7440-50-8	0.886	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved F SQL-I	7440-48-4	1.20	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved F SQL-I	7439-92-1	3.26	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese,Dissolved	7439-96-5	351.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	3.18	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	6.28	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved F SQL-I	7440-22-4	0.393	0.31	0.500	2	ug/l	J	6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	117.	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0731~~ 0.0800	~~0.049~~ 0.0713	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-18

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : SS018-MW16-DT01

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	17200000	2820	5000	10000	ug/l		2540 C-	11/16/15	1
Aluminum U MB, CCB-1	7429-90-5	~~21.3~~ 50.0	~~8~~ 21.9	50.0	100	ug/l	J	6020	11/17/15	1
Antimony U CCB-1	7440-36-0	~~0.325~~ 0.500	~~0.21~~ 0.325	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic	7440-38-2	29.4	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium	7440-39-3	20.2	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	6	25.0	100	ug/l		6020	11/17/15	50
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper FJ SQL, ICS-H	7440-50-8	0.897	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt F SQL-1	7440-48-4	1.05	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/17/15	1
Manganese	7439-96-5	386.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	3.04	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium	7782-49-2	6.80	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/17/15	1
Vanadium	7440-62-2	120.	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB-1	7439-97-6	0.108	~~0.049~~ 0.108	~~0.0000~~ 0.108	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane U J CCAL-L	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

ESC Sample # : L800817-18

Site ID :

Project # : 60425210.0057AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : SS018-MW16-DT01

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	1.88	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	19.4	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	126.	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	3.55	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride U TB-1	75-09-2	~~1.06~~ 2.50	~~1~~ 1.06	2.50	5	ug/l	J	8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene F SQL-1	127-18-4	0.744	0.372	0.500	1	ug/l	J	8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	8.80	0.398	0.500	1	ug/l	J4	8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride F SQL-1	75-01-4	0.562	0.259	0.500	1	ug/l	J	8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	105.				% Rec.		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 03, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800817-18

Sample ID : SS018-MW16-DT01

Site ID :

Project # : 60425210.0057AB

Collected By : Katie Abbott
Collection Date : 11/09/15 17:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	97.2				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-1	56-55-3	~~0.00584~~ 0.0250	~~0.0041~~ 0.00584	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-1	91-20-3	0.0559	~~0.0198~~ 0.0559	~~0.0250~~ 0.0559	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	117.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	110.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	112.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/19/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/19/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/19/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/19/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/19/15~~	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/19/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/19/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/19/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/19/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/19/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/19/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/19/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/19/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/19/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/19/15	1

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ESC Sample # : L800817-18

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Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/19/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/19/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/19/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/19/15	1
Di-n-butyl phthalate U MB-1	84-74-2	~~0.488~~	~~0.266~~	1.00	3	ug/l	J	8270C	11/19/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/19/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/19/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/19/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/19/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/19/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/19/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/19/15	1
2,4-Dinitrophenol UJ LCS, D-1	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/19/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/19/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/19/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/19/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/19/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/19/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/19/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/19/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/19/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l	J4	8270C	11/19/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/19/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/19/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/19/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/19/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	36.7				% Rec.		8270C	11/19/15	1
Phenol-d5	4165-62-2	33.3				% Rec.		8270C	11/19/15	1
Nitrobenzene-d5	4165-60-0	54.3				% Rec.		8270C	11/19/15	1
2-Fluorobiphenyl	321-60-8	67.2				% Rec.		8270C	11/19/15	1
2,4,6-Tribromophenol	118-79-6	110.				% Rec.		8270C	11/19/15	1
p-Terphenyl-d14	1718-51-0	87.2				% Rec.		8270C	11/19/15	1

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Note:
The reported analytical results relate only to the sample submitted.
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Reported: 11/20/15 18:16 Revised: 02/03/16 16:27

DNR = do Not report

KA 2/2/16

Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L800823
Sampling Event Dates: November 10, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Katie Abbott, URS Project Chemist
Date Completed: February 9, 2016
Peer Reviewer: Sheri Fling, URS Project Quality Assurance Manager (QAM)

The table below summarizes the data package and sample identifications discussed in this data review.

Field Identification	Sample Type	Lab Identification	Matrix	Analyses					
				VOCs	SVOCs	PAHs	Total Metals	Dissolved Metals	TDS
TU503-MW01-ND01	SA	L800823-01	Water	---	---	---	---	X	---
TU503-MW01-NT01	SA	L800823-02	Water	X	X	X	X	---	X
TU503-MW02-DT01	FD	L800823-03	Water	X	X	X	X	---	X
TU503-MW02-ND01	SA	L800823-04	Water	---	---	---	---	X	---
TU503-MW02-NT01	SA	L800823-05	Water	X	X	X	X	---	X
TU503-MW02-DD01	FD	L800823-06	Water	---	---	---	---	X	---
TU503-MW03-NT01	SA	L800823-07	Water	X	X	X	X	---	X
TU503-MW03-ND01	SA	L800823-08	Water	---	---	---	---	X	---
TU503-MW04-NT01	SA	L800823-09	Water	X	X	X	X	---	X
TU503-MW04-ND01	SA	L800823-10	Water	---	---	---	---	X	---
TU503-TMW12-ND01	SA	L800823-11	Water	---	---	---	---	X	---
TU503-TMW12-NT01	SA	L800823-12	Water	X	X	X	X	---	X

Sample Type: SA – Sample FD – Field Duplicate
X^m - Matrix Spike/Matrix Spike Duplicate

Analyses: TDS – Total Dissolved Solids (SM2540C)
Total/Dissolved Metals – Antimony, Arsenic, Cadmium, Chromium, Cobalt, Lead, Nickel, Selenium, Silver, Thallium, Mercury, Aluminum, Barium, Beryllium, Copper, Manganese, Vanadium, Zinc (6020/7470A)
PAHs – Polynuclear Aromatic Hydrocarbons (8270C SIM)
SIM – Selective Ion Monitoring
SVOCs – Semivolatile Organic Compounds (8270C)
VOCs – Volatile Organic Compounds (8260B)

The data review was conducted in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites:

AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14; Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

General Overall Assessment:

_____ Data are usable without qualification.
__X__ Data are usable with qualification (noted below).
_____ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any laboratory case narrative comments concerning data qualification were addressed in the table below.

Trace level detects, reported between the method detection limit (MDL) and the reporting limit (LOQ), have been qualified as estimated (F SQL-I). All other occurrences of data qualification are covered in the following table.

Review Parameter	Criteria Met?	Comment
Chain of Custody & Sample Receipt	No	The samples were received by ESC Lab Sciences in good condition and were consistent with the accompanying chain of custody (COC). The cooler temperatures upon receipt were within the recommended ≤6 degrees Celsius (°C) temperature range. The samples were shipped to the laboratory with the volatile organic analysis (VOA) vials for the volatile organic compounds (VOCs) analysis in one cooler and the other sample containers (e.g., metals) in separate coolers. A complete signed original COC was included in each of the coolers with a footnote that stated the following: the circled analyses represent those analyses for which bottles are contained in this cooler. However, upon arrival at the laboratory, sample receiving discarded one of the two COCs submitted for each sample assuming one COC was a duplicate. As this had no impact on sample login or reporting of results, data qualification was not necessary. Trip blanks samples were included in each cooler containing samples to be analyzed for VOCs and gasoline range organics (GROs). However, upon receipt the trip blank samples and the field blank samples were logged into two data packages and therefore, not reported with the samples from the same cooler. The associated trip blanks were identified based on the field notes and qualification was only extended to results for those samples shipped in the same cooler as the trip blank. The field blanks were assessed collectively and any resultant qualification was discussed in Section 4.4 of the validation report.
Reporting	Yes	**Revised Reports** Revised reports were required to remove 2-chloronaphthalene from the polynuclear aromatic hydrocarbon (PAH) analyte list, to correct the methyl cyclohexane results, and to remove total and dissolved iron from the metals list. **Method 8260B (VOCs)** During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed

Review Parameter	Criteria Met?	Comment
		version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference spectra taken from the instrument calibration, the analyst was not seeing the improper alignment of spectra noted in the data package during his/her review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding. **Method 8270C Semivolatile Organic Compounds (SVOCs)** The results for 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene were not reported by Method 8270C SVOCs but were reported by Method 8260B VOCs. As the detection limits (DLs), limits of detection (LODs), and limits of quantitation (LOQs) are lower by Method 8260B, further action was not necessary. The laboratory noted 4-methylphenol cannot be reported as 3 & 4-methylphenol coelute during the analysis; therefore, the analytes are reported together and 3&4-methylphenol on the data sheets and in the electronic database. **Method 6020 (Inductively Coupled Plasma Mass Spectrometer (ICPMS) Metals)** Several samples were re-analyzed for aluminum and beryllium on separate instrument. The quality control samples were digested and analyzed with all of the samples in the original analysis, and were not re-analyzed with the reanalysis; however, continuing calibration blanks (CCBs) and continuing calibration verifications (CCVs) were performed and evaluated for contamination and instrument calibration.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method Blank • Continuing Calibration Blanks	No	With the exceptions listed in Table 1, target analytes were not detected within the method or calibration blanks.
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate None in this package • Total vs. Partial Analyses (Metals) • Laboratory Duplicate TU503-TMW12-NT01 (TDS)	No	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the quality assurance project plan (QAPP) requirement of one per twenty samples. An MS/MSD was not performed on a sample from this data package. Consistent with standard operating procedure (SOP) 14, when MS/MSD issues accounted for less than 35% of the MS/MSD analyses conducted, applicable data qualification was limited to qualification of the parent sample of the affected analyte. When >35% of the MS/MSD results did not meet criteria, evaluation was extended to all associated samples. See Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation. **Total vs. Partial Analyses (Metals)** Consistent with SOP 14, results for the total analysis of a particular analyte should be greater than the results for a partial analyte of that analyte. The following criteria were used to evaluate the total versus dissolved results:

Review Parameter	Criteria Met?	Comment
		• In instances where the value for a partial analysis exceed that for a total analysis and both of the results are >5xLOQ, the criterion utilized is that the two values should agree within ±30%. • In instances where the value for a partial analysis exceeds that for a total analysis and either of the results is 5xLOQ, the absolute difference between the results is compared against an evaluation criterion of 2xLOQ. With the exceptions listed in Table 2, the total metal sample results and associated dissolved sample results met the concentration-dependent criteria. **Laboratory Duplicate** The comparison between results of the laboratory duplicate pair met the criteria listed below. • When both the sample and duplicate values are >5xLOQ acceptable sampling and analytical precision is indicated by a relative percent difference (RPD) between the results of ≤20% for water samples (≤35% for soil samples). • Where the result for one or both analytes of the laboratory duplicate pair is <5xLOQ, satisfactory precision is indicated if the absolute difference between the laboratory duplicate results is <1xLOQ for water samples (<2xLOQ for soil samples).
Metals Only • Serial Dilution None in this package	NA	**Serial Dilution (Metals Only)** A serial dilution was not reported in association with the samples in this data package.
Method Quality Control • Surrogates (VOCs, PAHs, SVOCs)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank None in this package • Field Duplicate TU503-MW02-ND01/ TU503-MW02-DD01 TU503-MW02-NT01/ TU503-MW02-DT01 • Equipment Blank None in this package • Field Blank None in this package	Yes	**Trip Blank** A trip blank sample was submitted with the coolers; it was reported and evaluated in separate data packages (L800830 and L801106). **Field Duplicate** The frequency of field duplicates met the QAPP requirement of one per twenty samples. The comparison between results of the field duplicate pair met the criteria listed below. • When both the sample and duplicate values are >5xLOQ acceptable sampling and analytical precision is indicated by an RPD between the results of ≤30% for water samples (≤50% for soil samples). • Where the result for one or both analytes of the field duplicate pair is <5xLOQ, satisfactory precision is indicated if the absolute difference between the field duplicate results is <2xLOQ for water samples (<3.5xLOQ for soil samples). Consistent with SOP 14, when field duplicate issues accounted for less than 35% of the field duplicate analyses conducted, applicable data qualification was limited to qualification of the parent sample for the affected analyte.

Review Parameter	Criteria Met?	Comment
		When >35% of the field duplicate results did not meet criteria, evaluation was extended to all associated samples. See Section 4.3 of the data validation report for overall qualifiers resulting from the field duplicate evaluation. **Equipment Blank** As dedicated equipment was used to collect these samples, an equipment blank was not submitted for this sampling event. Further action was not necessary. **Field Blank** The frequency of field blanks met the QAPP requirement of one per twenty samples. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.
LODs met?	No	Due to dilutions, several total and dissolved metals results were reported as non-detect or estimated at elevated LODs. See Section 3.6 of the validation report for further discussion.
Other Parameters	Yes	Naphthalene (8260B and 8270C- PAHs) and hexachloro-1,3-butadiene and 1,2,4-trichlorobenzene (8260B and 8270C) were analyzed by multiple methods. Results were selected for reporting using the following criteria: • If both results were non-detect, the non-detect result with the lower DL was selected. • If both results were reported as detected, the higher detected result was selected for reporting. • If one result was reported as non-detect and the other result was reported as detected, the detected result was selected for reporting.
Initial Calibration	Yes	**Methods 8260B VOCs & 8270C SVOCs** A minimum relative response factor (RRF) of 0.05 was used for the system performance check compounds (SPCCs) and all SPCCs met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a requirement of 15% was used. The %RSD values for all target analytes in the calibration were less than 15%. Therefore, the initial calibration met method acceptance criteria. **Method 8270C PAHs** The %RSD values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **Method 6020 (ICPMS Metals) & 7470A Mercury** The initial calibrations (ICALs) were performed in association with the samples reported in this package. The relationship between instrument response and concentration was established with a blank and at least five standards. The calibrations were verified with the analysis of an initial calibration verification (ICV) standard. All metals were recovered within the method acceptance range of 90-110%.

Review Parameter	Criteria Met?	Comment
		Total Dissolved Solids (TDS) ICALs are not required per the method for TDS.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** With the exceptions listed in Table 3, the percent differences (%Ds) for all CCCs in the ICVs and continuing calibrations (CCALs) were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 20%. **Methods 8270C SVOCs & 8270C PAHs** With the exceptions listed in Table 3, the %D values for all target analytes in the calibration were less than 20%. **Method 6020 (ICPMS Metals)** Calibration verification analyses were conducted at the proper frequency. All metals were recovered within the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2 low level acceptance range of 80-120% and the method medium/high acceptance range of 90-110%. **Method 7470A Mercury** Calibration verification analyses were conducted at the proper frequency. All results were recovered within the DoD QSM version 4.2 acceptance range of 90-110%. A low level calibration verification is not required per DoD QSM version 4.2; therefore, laboratory limits were used. **TDS** Calibration verifications are not required for TDS.
Interference Check Standard (Metals Only)	No	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 80-120% in the ICS AB solution. With the exceptions listed in Table 4, interferent elements were not present in the samples at concentrations greater than those in the ICSs. The interferent elements aluminum, calcium, iron, potassium, magnesium, molybdenum, sodium, and/or titanium were present in most samples in this data package at concentrations greater than or equal to those in the ICSs. As such, these samples were evaluated for positive and negative biases suggested by the ICS A. Data qualification was issued if the absolute value of the ICS A result was greater than the DL and it suggested a positive or negative bias which accounted for more than 25% of associated sample results or LODs. (Note: The ICS A solution only contains the interferent elements aluminum, calcium, iron, and magnesium so any positive or negative result for other analytes is inferred to be a bias potentially caused by one or more of the interferent elements present). Table 4 summarizes the resultant data qualification on the basis of the ICS results.
Internal Standard (VOCs/PAHs/Metals (6020))	Yes	Recoveries for the internal standards in field samples were within the applicable acceptance limits. Therefore, data qualification based on internal standards was not necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate	No	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. With the exceptions listed in Table 5, all of the LCS recoveries and LCS/LCSD RPDs were within the QAPP acceptance limits. These

Review Parameter	Criteria Met?	Comment
		results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Package Completeness	Yes	The results are usable as qualified for the project objective. The data are 100% complete.

> - Greater Than
< - Less Than
≤ - Less Than or Equal to
± - Plus or Minus
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCB – Continuing Calibration Blank
CCCs – Calibration Check Compounds
CCV – Continuing Calibration Verification
COC – Chain of Custody
DLs – Detection Limits
DoD – Department of Defense
GRO – Gasoline Range Organics
ICAL – Initial Calibration
ICPMS - Inductively Coupled Plasma Mass Spectrometry
ICS – Interference Check Standard
ICV – Initial Calibration Verification
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
LOQ – Limit of Quantitation
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
NA – Not Applicable
PAHs – Polynuclear Aromatic Hydrocarbons
QAPP – Quality Assurance Project Plan
QSM – Quality Systems Manual
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
SVOCs – Semivolatile Organic Compounds
TDS – Total Dissolved Solids
VOA – Volatile Organic Analysis
VOCs – Volatile Organic Compounds

Table 1: Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
Total Metals			
MB Batch WG829017 TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW02-NT01 TU503-MW03-NT01 TU503-MW04-NT01 TU503-TMW12-NT01	Mercury	0.0950 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB,CCB-I).
CCB WG829017 TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW02-NT01 TU503-MW03-NT01 TU503-MW04-NT01 TU503-TMW12-NT01		0.071 µg/L	
CCB WG829017 TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW02-NT01 TU503-MW03-NT01 TU503-MW04-NT01 TU503-TMW12-NT01			
MB Batch WG829003 TU503-MW01-NT01 TU503-MW02-DT01	Aluminum	13.8 µg/L	The associated aluminum results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).

Associated Samples	Analyte	Concentration	Qualification
TU503-MW02-NT01 TU503-MW03-NT01 TU503-MW04-NT01 TU503-TMW12-NT01	Barium	1.37 µg/L	None. The associated barium results were reported at concentrations >5x the concentration of the blank contamination.
CCB WG829003 TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW02-NT01 TU503-MW03-NT01 TU503-MW04-NT01 TU503-TMW12-NT01	Antimony	0.281 µg/L	The associated antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
CCB WG829003 TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW02-NT01 TU503-MW03-NT01 TU503-MW04-NT01 TU503-TMW12-NT01	Aluminum	6.22 µg/L	None. The associated aluminum results were reported at concentrations >5x the concentration of the blank contamination.
	Antimony	0.251 µg/L	The associated antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).
ICB WG829003 TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW02-NT01 TU503-MW03-NT01 TU503-MW04-NT01 TU503-TMW12-NT01	Silver	0.727 µg/L	None. The associated silver results were reported as non-detect.
Dissolved Metals			
MB Batch WG829716 TU503-MW01-ND01 TU503-MW02-ND01 TU503-MW02-DD01 TU503-MW03-ND01 TU503-MW04-ND01 TU503-TMW12-ND01	Dissolved Mercury	0.0712 µg/L	The associated dissolved mercury results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
MB Batch WG829005 TU503-MW01-ND01 TU503-MW02-ND01 TU503-MW02-DD01 TU503-MW03-ND01 TU503-MW04-ND01 TU503-TMW12-ND01	Dissolved Aluminum	3.06 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Dissolved Antimony	0.280 µg/L	
	Dissolved Barium	0.415 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Dissolved Lead	0.299 µg/L	
	Dissolved Vanadium	0.468 µg/L	
CCB WG829005 TU503-MW01-ND01 TU503-MW02-ND01 TU503-MW02-DD01 TU503-MW03-ND01 TU503-MW04-ND01 TU503-TMW12-ND01	Dissolved Antimony	0.260 µg/L	The associated dissolved antimony results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U CCB-I).

Associated Samples	Analyte	Concentration	Qualification
CCB WG829005 TU503-MW01-ND01 TU503-MW02-ND01 TU503-MW02-DD01 TU503-MW03-ND01 TU503-MW04-ND01 TU503-TMW12-ND01			
PAHs			
MB Batch WG828995 TU503-MW02-NT01 TU503-MW04-NT01	Benzo(a)anthracene	0.00658 µg/L	The associated benzo(a)anthracene results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Benzo(b)fluoranthene	0.00223 µg/L	None. The associated d results were reported as non-detect.
	Benzo(g,h,i)perylene	0.00274 µg/L	
MB Batch WG829386 TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW03-NT01 TU503-TMW12-NT01	1-Methylnaphthalene	0.0100 µg/L	None. The associated results were reported as non-detect.
	2-Methylnaphthalene	0.0113 µg/L	
	Benzo(a)anthracene	0.0150 µg/L	The associated benzo(a)anthracene results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Benzo(b)fluoranthene	0.0109 µg/L	None. The associated results were reported as non-detect.
	Benzo(g,h,i)perylene	0.0126 µg/L	
	Chrysene	0.0113 µg/L	
	Dibenz(a,h)anthracene	0.00979 µg/L	
	Fluorene	0.00940 µg/L	
	Naphthalene	0.0374 µg/L	The associated naphthalene results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Phenanthrene	0.0136 µg/L	None. The associated phenanthrene results were reported as non-detect.

> - Greater Than
< - Less Than
µg/L – Micrograms per Liter
CCB – Continuing Calibration Blank
I – Indeterminate Bias
MB – Method Blank
PAHs – Polynuclear Aromatic Hydrocarbons
U – Non-detect

Table 2: Total vs. Partial Outliners and Resultant Data Qualification

Sample	Analyte	Total Result (µg/L)	Dissolved Result (µg/L)	Criteria not Met	Qualification
TU503-MW01-NT01/ TU503-MW01-NT01	Nickel	14.1	24.8	RPD >30%	As the RPD between the total and dissolved results exceeded 30%, results were qualified as estimated (J TvP-I).
TU503-MW02-DT01/ TU503-MW02-DD01	Manganese	29.1	47		
	Nickel	63.8	91.3		
TU503-MW02-NT01/ TU503-MW02-ND01	Manganese	35.8	57.5		
	Nickel	76.6	111		

µg/L – Micrograms per Liter
> - Greater Than
% - Percent
I – Indeterminate Bias
J – Estimated
RPD – Relative Percent Difference
TvP – Total versus Partial

Table 3: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
VOCs			
TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW02-NT01 TU503-MW03-NT01 TU503-MW04-NT01 TU503-TMW12-NT01	Bromomethane	-36.2 (±20)	As the potential bias was considered to be low, the associated bromomethane results were qualified as estimated (UJ CCAL-L).
	2-Butanone	+26.4 (±20)	As the potential bias was considered to be high, and the associated 2-butanone samples results were reported as non-detect, data qualification was not considered necessary.
SVOCs			
TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW02-NT01 TU503-MW03-NT01 TU503-MW04-NT01 TU503-TMW12-NT01	3&4-Methyl Phenol	-49.6 (±20)	As the potential bias was considered to be low, the associated 3&4-methyl phenol results were qualified as estimated (UJ CCAL-L).

± - Plus or minus
L – Low Bias
VOCs – Volatile Organic Compounds
%D – Percent Difference
SVOCs – Semivolatile Organic Compounds
CCAL – Continuing Calibration
UJ – Estimated

Table 4: ICS Outliers and Resultant Data Qualification

Interferent Element	Analyte	ICS A (µg/L)	DL (µg/L)	Qualified Samples	Qualification
Calcium, Magnesium, Sodium	Total Chromium	1.2	0.54	TU503-MW01-NT01 TU503-MW02-NT01 TU503-MW04-NT01 TU503-TMW12-NT01	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
	Total Copper	0.60	0.52		
	Total Zinc	2.7	2.56	TU503-MW01-NT01	
	Dissolved Chromium	1.2	0.54	TU503-MW02-ND01 TU503-MW02-DD01 TU503-MW04-ND01	

µg/L – Micrograms per Liter
ICS – Interference Check Standard
DL – Detection Limit
J - Estimated
H – High Bias

Table 5: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
PAHs				
LCS WG829386 TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW03-NT01 TU503-TMW12-NT01	Acenaphthene	103/**111** (45-110)	7.09 (20)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.
	Acenaphthylene	105/**112** (50-105)	5.72 (20)	
	Anthracene	**116/121** (55-110)	4.18 (20)	
	Benzo(a)anthracene	**116/121** (55-110)	4.11 (20)	
	Benzo(a)pyrene	**122/126** (55-110)	3.08 (20)	
	Benzo(b)fluoranthene	117/**130** (45-120)	10.4 (20)	

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
	Benzo(g,h,i)perylene	123/**132** (40-125)	6.99 (20)	
	Benzo(k)fluoranthene	**128**/123 (45-125)	3.96 (20)	
	Chrysene	**121/126** (55-110)	4.13 (20)	
	Fluoranthene	**119/124** (55-115)	3.03 (20)	
	Fluorene	108/**114** (50-110)	4.26 (20)	
	Indeno(1,2,3-c,d)pyrene	123/**129** (45-125)	5.85 (20)	
	Phenanthrene	115/**118** (50-115)	3 (20)	

%R – Percent Recoveries LCS – Laboratory Control Sample PAHs – Polynuclear Aromatic Hydrocarbons
RPD – Relative Percent Difference
Bold indicates a recovery outside of acceptance limits.

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
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8181 E. Tufts Avenue
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February 02, 2016

ESC Sample # : L800823-01

Site ID :

Project # : 60425210.0055AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW01-ND01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved U MB-I	7429-90-5	~~15.2~~ 50.0	~~2~~ 15.2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB-I CCB-I	7440-36-0	~~0.430~~ 0.500	~~0.21~~ 0.430	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	5.65	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	16.0	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved FJ SQL, MS-H	7440-50-8	1.66	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved	7440-48-4	2.48	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	366.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved J Tv P-I	7440-02-0	24.8	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved ~~FJ SQL~~ J MS-H	7782-49-2	8.35	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	58.2	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0609~~ 0.0800	~~0.049~~ 0.0609	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-02

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-MW01-NT01

Project # : 60425210.0055AB

Collected By : Katie Abbott
Collection Date : 11/10/15 15:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	6680000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum	7429-90-5	142.	2	50.0	100	ug/l		6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.244~~ 0.500	~~0.21~~ 0.244	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic	7440-38-2	6.29	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium	7440-39-3	15.7	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	6	25.0	100	ug/l		6020	11/17/15	50
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium FS SOL, ICS-H	7440-47-3	0.991	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper FS SOL, ICS-H	7440-50-8	1.90	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt F SOL-I	7440-48-4	1.78	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead F SOL-I	7439-92-1	0.323	0.24	0.500	2	ug/l	J	6020	11/17/15	1
Manganese	7439-96-5	288.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel J TVP-I	7440-02-0	14.1	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium	7782-49-2	9.40	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/17/15	1
Vanadium	7440-62-2	61.2	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc FS SOL, ICS-H	7440-66-6	2.58	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury U MB, ICCB-I	7439-97-6	0.0986	~~0.049~~ 0.0986	~~0.0800~~ 0.0986	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane U J CCAL-C	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1

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8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW01-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:10

ESC Sample # : L800823-02

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride U TB-I	75-09-2	2.50 ~~1.20~~	1.20 ~~1.12~~	2.50	5	ug/l	J	8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/17/15	1

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Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-02

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-MW01-NT01

Project # : 60425210.0055AB

Collected By : Katie Abbott
Collection Date : 11/10/15 15:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	95.6				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00595~~ 0.02500	~~0.00411~~ 0.00595	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-I	91-20-3	0.0394	~~0.0198~~ 0.0394	~~0.0250~~ 0.0394	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	103.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	110.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	110.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid	65-85-0	U	0.44	5.00	10	ug/l		8270C	11/20/15	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1

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Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1
Benzylbutyl phthalate F SQL-I	85-68-7	0.390	0.275	1.00	3	ug/l	J	8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/20/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/20/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/20/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrophenol UJ D-I	51-28-5	U	3.25	5.00	10	ug/l		8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	50.2				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	37.3				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	73.0				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	84.7				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	70.1				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	94.6				% Rec.		8270C	11/20/15	1

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DNR = do not report

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW02-DT01

Collected By : Katie Abbott
Collection Date : 11/10/15 12:50

ESC Sample # : L800823-03

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	15100000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum U MB-I	7429-90-5	~~46.9~~ 50.0	~~2~~ 46.9	50.0	100	ug/l	J	6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.286~~	~~0.21~~ 0.500	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic	7440-38-2	2.96	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium	7440-39-3	24.8	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	6	25.0	100	ug/l		6020	11/17/15	50
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	7.44	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper F SQL-I	7440-50-8	3.81	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt F SQL-I	7440-48-4	1.23	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/17/15	1
Manganese J TVP-I	7439-96-5	29.1	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel J TVP-I	7440-02-0	63.8	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium	7782-49-2	11.2	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/17/15	1
Vanadium	7440-62-2	25.4	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB ~~I~~ CCB-I	7439-97-6	0.122	~~0.049~~ 0.122	~~0.0800~~ 0.122	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane U J CCAL-L	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform ~~F SQL-I~~ U FB-I	67-66-3	~~0.453~~	~~0.324~~ 0.453	2.50	5	ug/l	J	8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-03

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-MW02-DT01

Project # : 60425210.0055AB

Collected By : Katie Abbott
Collection Date : 11/10/15 12:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride U TB-I	75-09-2	~~1.32~~ 2.50	~~1~~ 1.32	2.50	5	ug/l	J	8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	100.				% Rec.		8260B	11/17/15	1

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Project # : 60425210.0055AB

Collected By : Katie Abbott
Collection Date : 11/10/15 12:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	99.1				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00597~~ 0.0250	~~0.0041~~ 0.00597	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-I	91-20-3	~~0.0218~~ 0.0250	~~0.0198~~ 0.0217	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	101.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	108.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	108.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid	65-85-0	U	0.44	5.00	10	ug/l		8270C	11/20/15	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1

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DNR = Do Not Report

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW02-DT01

Collected By : Katie Abbott
Collection Date : 11/10/15 12:50

ESC Sample # : L800823-03

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/20/15	1
Di-n-butyl phthalate F Sal-2	84-74-2	0.439	0.266	1.00	3	ug/l	J	8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/20/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/20/15	1
1,2,4-Trichlorobenzene DML	120-82-1	U	0.355	5.00	10	ug/l		8270C	11/20/15	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrophenol US D-I	51-28-5	U	3.25	5.00	10	ug/l		8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol US CCAL-C	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	52.5				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	39.5				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	78.1				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	87.1				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	80.8				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	98.5				% Rec.		8270C	11/20/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-04

Site ID :

Project # : 60425210.0055AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW02-ND01

Collected By : Katie Abbott
Collection Date : 11/10/15 12:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved U MB-I	7429-90-5	~~13.8~~ 50.0	~~2~~ 13.8	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB,ICCB-I	7440-36-0	~~0.257~~ 0.500	~~0.21~~ 0.257	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved FJ SOL,MS-H	7440-38-2	1.84	0.25	0.500	2	ug/l	J	6020	11/17/15	1
Barium,Dissolved	7440-39-3	29.5	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved FJ SOL,ICS-H	7440-47-3	1.72	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper,Dissolved J MS-H	7440-50-8	7.47	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt,Dissolved	7440-48-4	2.16	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved J TVP-I	7439-96-5	57.5	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved J TVP-I	7440-02-0	111.	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	11.6	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	16.9	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0769~~ 0.0800	~~0.049~~ 0.0769	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 12:50

ESC Sample # : L800823-05

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	15500000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum U MB-I	7429-90-5	52.8	~~2~~ 52.8	~~50.0~~ 52.8	100	ug/l	J	6020	11/17/15	1
Antimony U CCB-I	7440-36-0	~~0.318~~ 0.500	~~0.21~~ 0.318	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic	7440-38-2	2.79	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium	7440-39-3	25.9	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	6	25.0	100	ug/l		6020	11/17/15	50
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium	7440-47-3	7.48	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper F SQL-I	7440-50-8	4.42	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt F SQL-I	7440-48-4	1.53	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/17/15	1
Manganese J TVP-I	7439-96-5	35.8	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel J TVP-I	7440-02-0	76.6	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium	7782-49-2	11.5	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/17/15	1
Vanadium	7440-62-2	23.3	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB-I CCB-I	7439-97-6	0.106	~~0.049~~ 0.106	~~0.0800~~ 0.106	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane U J CCAL-L	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform ~~F SQL-I~~ U FB-I	67-66-3	~~0.378~~ 2.50	~~0.324~~ 0.378	2.50	5	ug/l	J	8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-05

Site ID :

Project # : 60425210.0055AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 12:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride U PB-I	75-09-2	~~1.15~~ 2.50	~~1~~ 1.15	2.50	5	ug/l	J	8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Naphthalene DML	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/17/15	1

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Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 12:50

ESC Sample # : L800823-05

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	95.3				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00603~~ 0.0250	~~0.0041~~ 0.00603	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	84.2				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	75.1				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	67.1				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid	65-85-0	U	0.44	5.00	10	ug/l		8270C	11/20/15	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 12:50

ESC Sample # : L800823-05

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1
Benzylbutyl phthalate FSAL-L	85-68-7	0.322	0.275	1.00	3	ug/l	J	8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/20/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/20/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/20/15	1
~~1,2,4-Trichlorobenzene~~ DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrophenol USD-L	51-28-5	U	3.25	5.00	10	ug/l		8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol US CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	47.4				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	33.5				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	63.6				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	78.6				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	75.2				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	94.2				% Rec.		8270C	11/20/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-06

Site ID :

Project # : 60425210.0055AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW02-DD01

Collected By : Katie Abbott
Collection Date : 11/10/15 12:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved U MB-I	7429-90-5	~~14.8~~ 50.0	~~2~~ 14.8	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB, ICCB-I	7440-36-0	~~0.309~~ 0.300	~~0.21~~ 0.309	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved FJ SOL, MS-H	7440-38-2	1.94	0.25	0.500	2	ug/l	J	6020	11/17/15	1
Barium,Dissolved	7440-39-3	26.7	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved J ICS-H	7440-47-3	2.47	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved J MS-H	7440-50-8	6.92	0.52	1.50	5	ug/l		6020	11/17/15	1
Cobalt,Dissolved F SQL-I	7440-48-4	1.86	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved J TVP-I	7439-96-5	47.0	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved J TVP-I	7440-02-0	91.3	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	11.2	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	19.6	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved F SQL-I	7440-66-6	2.72	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0795~~ 0.0800	~~0.049~~ 0.0795	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:40

ESC Sample # : L800823-07

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	4570000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum	7429-90-5	220.	2	50.0	100	ug/l		6020	11/17/15	1
Antimony	7440-36-0	U	0.21	0.500	2	ug/l		6020	11/17/15	1
Arsenic	7440-38-2	3.85	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium	7440-39-3	17.0	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	6	25.0	100	ug/l		6020	11/17/15	50
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium FJ SQL, ICS-H	7440-47-3	0.846	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper FJ SQL, ICS-H	7440-50-8	1.53	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt F SQL-1	7440-48-4	1.09	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead F SQL-1	7439-92-1	0.295	0.24	0.500	2	ug/l	J	6020	11/17/15	1
Manganese	7439-96-5	220.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	4.48	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium	7782-49-2	4.42	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/17/15	1
Vanadium	7440-62-2	75.0	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB, ICCB-I	7439-97-6	0.101	~~0.049~~ 0.101	~~0.0800~~ 0.101	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane U J CCAL-L	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1

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February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:40

ESC Sample # : L800823-07

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride U TB-I	75-09-2	~~1.17~~ 2.50	~~1~~ 1.17	2.50	5	ug/l	J	8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	104.				% Rec.		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-07

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-MW03-NT01

Project # : 60425210.0055AB

Collected By : Katie Abbott
Collection Date : 11/10/15 15:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	94.3				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00624~~ 0.0250	~~0.0041~~ 0.00624	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-I	91-20-3	0.0372	~~0.0196~~ 0.0372	~~0.0250~~ 0.0372	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	106.				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	112.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	109.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid	65-85-0	U	0.44	5.00	10	ug/l		8270C	11/20/15	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene ONR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-07

Site ID :

Project # : 60425210.0055AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/20/15	1
Di-n-butyl phthalate FSQL-2	84-74-2	0.319	0.266	1.00	3	ug/l	J	8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/20/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/20/15	1
1,2,4-Trichlorobenzene OMI	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrophenol US D-I	51-28-5	U	3.25	5.00	10	ug/l		8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol US CCAL-C	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	35.2				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	27.4				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	58.2				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	71.1				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	75.0				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	94.4				% Rec.		8270C	11/20/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-08

Site ID :

Project # : 60425210.0055AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW03-ND01

Collected By : Katie Abbott
Collection Date : 11/10/15 15:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F Sal-I	7429-90-5	40.9	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB-I ~~CCB-I~~	7440-36-0	~~0.325~~ 0.500	~~0.21~~ 0.325	0.500	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	3.59	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	15.3	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved F J SQL MS-H	7440-50-8	1.25	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved F Sal-I	7440-48-4	1.26	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	198.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	6.30	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	4.20	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	68.6	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	0.0800 ~~0.0780~~	0.0780 ~~0.049~~	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-09

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-MW04-NT01

Project # : 60425210.0055AB

Collected By : Katie Abbott
Collection Date : 11/10/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	9200000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum F SQL-I	7429-90-5	89.5	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony U CCB-I	7440-36-0	0.932	~~0.21~~ 0.932	~~0.500~~ 0.932	2	ug/l	J	6020	11/17/15	1
Arsenic	7440-38-2	9.15	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium	7440-39-3	27.1	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium FJ SQL, ICS-H	7440-47-3	0.543	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper FJ SQL, ICS-H	7440-50-8	2.08	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt	7440-48-4	2.65	0.26	0.500	2	ug/l		6020	11/17/15	1
Lead	7439-92-1	U	0.24	0.500	2	ug/l		6020	11/17/15	1
Manganese	7439-96-5	412.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	5.58	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium	7782-49-2	13.8	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/17/15	1
Vanadium	7440-62-2	63.7	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc	7440-66-6	U	2.56	5.00	25	ug/l		6020	11/17/15	1
Mercury U MB-X CCB-I	7439-97-6	0.112	~~0.049~~ 0.112	~~0.0800~~ 0.112	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene F SQL-I	71-43-2	0.568	0.331	0.500	1	ug/l	J	8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane U J CCAL-L	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 12:20

ESC Sample # : L800823-09

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride U TB-I	75-09-2	~~1.06~~ 2.50	~~1~~ 1.06	2.50	5	ug/l	J	8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800823-09

Sample ID : TU503-MW04-NT01

Site ID :

Project # : 60425210.0055AB

Collected By : Katie Abbott
Collection Date : 11/10/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	95.2				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-1	56-55-3	0.00656	~~0.0044~~ 0.00608	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene F Sal-1	86-73-7	0.0173	0.0085	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene F Sal-1	91-20-3	0.0473	0.0198	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene F Sal-1	90-12-0	0.0137	0.00821	0.0250	0.25	ug/l	J	8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	84.1				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	73.7				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	64.8				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid F Sal-1	65-85-0	3.25	0.44	5.00	10	ug/l	J	8270C	11/20/15	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1

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8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-09

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-MW04-NT01

Project # : 60425210.0055AB

Collected By : Katie Abbott
Collection Date : 11/10/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/20/15	1
Di-n-butyl phthalate FSQL-I	84-74-2	0.573	0.266	1.00	3	ug/l	J	8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/20/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/20/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrophenol UJ D-I	51-28-5	U	3.25	5.00	10	ug/l		8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	62.5				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	47.6				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	82.5				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	94.1				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	105.				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	100.				% Rec.		8270C	11/20/15	1

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Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-10

Site ID :

Project # : 60425210.0055AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-MW04-ND01

Collected By : Katie Abbott
Collection Date : 11/10/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	18.6	2	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved U MB-I, ICCB-I	7440-36-0	0.626	~~0.21~~ 0.626	~~0.500~~ 0.626	2	ug/l	J	6020	11/17/15	1
Arsenic,Dissolved J MS-H	7440-38-2	7.61	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium,Dissolved	7440-39-3	29.6	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved F J SQL, ICS-H	7440-47-3	0.574	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper,Dissolved F J SQL, MS-H	7440-50-8	4.47	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved F SQL-I	7440-48-4	1.68	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	313.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	6.16	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	14.2	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	52.1	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved F SQL-I	7440-66-6	3.59	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0717~~ 0.0800	~~0.049~~ 0.0717	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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Note:
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

ESC Sample # : L800823-11

Sample ID : TU503-TMW12-ND01

Site ID :

Project # : 60425210.0055AB

Collected By : Katie Abbott
Collection Date : 11/10/15 14:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved U MB-I	7429-90-5	~~15.0~~ 50.0	~~2~~ 15.0	50.0	100	ug/l	J	6020	11/17/15	1
Antimony,Dissolved	7440-36-0	U	0.21	0.500	2	ug/l		6020	11/17/15	1
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	1.93	0.25	0.500	2	ug/l	J	6020	11/17/15	1
Barium,Dissolved	7440-39-3	14.3	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.50	2	ug/l		6020	11/17/15	1
Copper,Dissolved FJ SQL, MS-H	7440-50-8	2.96	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt,Dissolved F JQL-I	7440-48-4	0.985	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead,Dissolved F SQL-I	7439-92-1	2.59	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese,Dissolved	7439-96-5	153.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel,Dissolved	7440-02-0	4.62	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium,Dissolved J MS-H	7782-49-2	4.76	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	25.0	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc,Dissolved FJ QL-I	7440-66-6	22.8	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury,Dissolved U MB-I	7439-97-6	~~0.0773~~ 0.0800	~~0.049~~ 0.0773	0.0800	0.2	ug/l	J	7470A	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-TMW12-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 14:25

ESC Sample # : L800823-12

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	12600000	2820	5000	10000	ug/l		2540 C-	11/17/15	1
Aluminum	7429-90-5	613.	2	50.0	100	ug/l		6020	11/17/15	1
Antimony	7440-36-0	U	0.21	0.500	2	ug/l		6020	11/17/15	1
Arsenic	7440-38-2	2.85	0.25	0.500	2	ug/l		6020	11/17/15	1
Barium	7440-39-3	22.2	0.36	1.00	5	ug/l		6020	11/17/15	1
Beryllium	7440-41-7	U	0.12	0.500	2	ug/l		6020	11/17/15	1
Cadmium	7440-43-9	U	0.16	0.500	1	ug/l		6020	11/17/15	1
Chromium FJ SQLICS-H	7440-47-3	1.55	0.54	1.50	2	ug/l	J	6020	11/17/15	1
Copper FJ SQLICS-H	7440-50-8	1.88	0.52	1.50	5	ug/l	J	6020	11/17/15	1
Cobalt FSQL-1	7440-48-4	1.77	0.26	0.500	2	ug/l	J	6020	11/17/15	1
Lead FSQL-1	7439-92-1	0.560	0.24	0.500	2	ug/l	J	6020	11/17/15	1
Manganese	7439-96-5	233.	0.25	0.500	5	ug/l		6020	11/17/15	1
Nickel	7440-02-0	7.26	0.35	1.00	2	ug/l		6020	11/17/15	1
Selenium	7782-49-2	4.68	0.38	1.00	2	ug/l		6020	11/17/15	1
Silver	7440-22-4	U	0.31	0.500	2	ug/l		6020	11/17/15	1
Thallium	7440-28-0	U	0.19	0.500	2	ug/l		6020	11/17/15	1
Vanadium	7440-62-2	28.1	0.18	0.500	5	ug/l		6020	11/17/15	1
Zinc FSQL-1	7440-66-6	24.4	2.56	5.00	25	ug/l	J	6020	11/17/15	1
Mercury U MBI-ICCB-I	7439-97-6	0.0946	~~0.049~~ 0.0946	~~0.0800~~ 0.0946	0.2	ug/l	J	7470A	11/16/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane UJ CCAL-L	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform ~~F SQL-1~~ U FB-I	67-66-3	~~0.365~~ 2.50	~~0.324~~ 0.366	2.50	5	ug/l	J	8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-12

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-TMW12-NT01

Project # : 60425210.0055AB

Collected By : Katie Abbott
Collection Date : 11/10/15 14:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride ~~Fail 2~~ TB-I	75-09-2	~~1.17~~ 2.50	~~1~~ 1.17	2.50	5	ug/l	J	8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l	J4	8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/17/15	1

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Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-TMW12-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 14:25

ESC Sample # : L800823-12

Site ID :

Project # : 60425210.0055AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	96.6				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Acenaphthylene U	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00599~~	~~0.0041~~ 0.00977	0.0250	0.05	ug/l	J	8270C-S	11/17/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Naphthalene U MB-I	91-20-3	0.0363	~~0.0196~~ 0.0363	~~0.0250~~ 0.0163	0.25	ug/l	J	8270C-S	11/17/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/17/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/17/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/17/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/17/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	99.7				% Rec.		8270C-S	11/17/15	1
2-Fluorobiphenyl	321-60-8	103.				% Rec.		8270C-S	11/17/15	1
p-Terphenyl-d14	1718-51-0	105.				% Rec.		8270C-S	11/17/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid	65-85-0	U	0.44	5.00	10	ug/l		8270C	11/20/15	1
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1

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Note:
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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800823-12

Site ID :

Project # : 60425210.0055AB

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TU503-TMW12-NT01

Collected By : Katie Abbott
Collection Date : 11/10/15 14:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/20/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/20/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/20/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrophenol UJ D-1	51-28-5	U	3.25	5.00	10	ug/l		8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	47.3				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	32.3				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	70.0				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	82.1				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	84.6				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	94.9				% Rec.		8270C	11/20/15	1

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Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L800830
Sampling Event Dates: November 10, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Katie Abbott, URS Project Chemist
Date Completed: February 9, 2016
Peer Reviewer: Sheri Fling, URS Project Quality Assurance Manager (QAM)

The table below summarizes the data package and sample identifications discussed in this data review.

Field Identification	Sample Type	Lab Identification	Matrix	Analyses					
				VOCs	SVOCs	PAHs	Total Metals	Dissolved Metals	TDS
TRIPBLANK-LT06	TB	L800830-01	Water	X	---	---	---	---	---
TRIPBLANK-LT07	TB	L800830-02	Water	X	---	---	---	---	---
FIELD BLANK-FT07	FB	L800830-03	Water	X	---	---	---	---	---
FIELD BLANK-FT11	FB	L800830-04	Water	X	---	---	---	---	---

Sample Type: FB – Field Blank TB – Trip Blank
X^m - Matrix Spike/Matrix Spike Duplicate
Analyses: TDS – Total Dissolved Solids (SM2540C)
Total/Dissolved Metals – Antimony, Arsenic, Cadmium, Chromium, Cobalt, Lead, Nickel, Selenium, Silver, Thallium, Mercury, Aluminum, Barium, Beryllium, Copper, Manganese, Vanadium, Zinc (6020/7470A)
PAHs – Polynuclear Aromatic Hydrocarbons (8270C SIM)
SIM – Selective Ion Monitoring
SVOCs – Semivolatile Organic Compounds (8270C)
VOCs – Volatile Organic Compounds (8260B)

The data review was conducted in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14; Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

General Overall Assessment:

_____ Data are usable without qualification.
__X__ Data are usable with qualification (noted below).
_____ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any laboratory case narrative comments concerning data qualification were addressed in the table below.

Trace level detects, reported between the method detection limit (MDL) and the reporting limit (LOQ), have been qualified as estimated (F SQL-I). All other occurrences of data qualification are covered in the following table.

Review Parameter	Criteria Met?	Comment
Chain of Custody & Sample Receipt	No	The samples were received by ESC Lab Sciences in good condition and were consistent with the accompanying chain of custody (COC). The cooler temperatures upon receipt were within the recommended ≤6 degrees Celsius (°C) temperature range. The samples were shipped to the laboratory with the volatile organic analysis (VOA) vials for the volatile organic compounds (VOCs) analysis in one cooler and the other sample containers (e.g., metals) in separate coolers. A complete signed original COC was included in each of the coolers with a footnote that stated the following: the circled analyses represent those analyses for which bottles are contained in this cooler. However, upon arrival at the laboratory, sample receiving discarded one of the two COCs submitted for each sample assuming one COC was a duplicate. As this had no impact on sample login or reporting of results, data qualification was not necessary. Trip blanks samples were included in each cooler containing samples to be analyzed for VOCs and gasoline range organics (GROs). However, upon receipt the trip blank samples and the field blank samples were logged into two data packages and therefore, not reported with the samples from the same cooler. The associated trip blanks were identified based on the field notes and qualification was only extended to results for those samples shipped in the same cooler as the trip blank.
Reporting	Yes	**Revised Reports** A revised report was required to correct the methyl cyclohexane results. **Method 8260B (VOCs)** During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference spectra taken from the instrument calibration, the analyst was not seeing the improper alignment of spectra noted in the data package during his/her review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method Blank	Yes	Target analytes were not detected within the method blanks.

Review Parameter	Criteria Met?	Comment
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate None in this package	NA	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the quality assurance project plan (QAPP) requirement of one per twenty samples. An MS/MSD was not performed on a sample from this data package. Consistent with standard operating procedure (SOP) 14, when MS/MSD issues accounted for less than 35% of the MS/MSD analyses conducted, applicable data qualification was limited to qualification of the parent sample of the affected analyte. When >35% of the MS/MSD results did not meet criteria, evaluation was extended to all associated samples. See Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation.
Method Quality Control • Surrogates (VOCs)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank TRIPBLANK-LT06 TRIPBLANK-LT07 • Field Duplicate None in this package • Equipment Blank None in this package • Field Blank FIELD BLANK-FT07 FIELD BLANK-FT11	No	**Trip Blank** With the exceptions listed in Table 1, target analytes were not detected in the trip blanks. **Field Duplicate** The frequency of field duplicates met the QAPP requirement of one per twenty samples. A field duplicate was not submitted with the data package. Consistent with SOP 14, when field duplicate issues accounted for less than 35% of the field duplicate analyses conducted, applicable data qualification was limited to qualification of the parent sample for the affected analyte. When >35% of the field duplicate results did not meet criteria, evaluation was extended to all associated samples. See Section 4.3 of the data validation report for overall qualifiers resulting from the field duplicate evaluation. **Equipment Blank** As dedicated equipment was used to collect these samples, an equipment blank was not submitted for this sampling event. Further action was not necessary. **Field Blank** The frequency of field blanks met the QAPP requirement of one per twenty samples. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.
LODs met?	Yes	No results were reported as non-detect at elevated limits of detection (LODs).
Initial Calibration	Yes	**Method 8260B VOCs** A minimum relative response factor (RRF) of 0.05 was used for the system performance check compounds (SPCCs) and all SPCCs met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a

Review Parameter	Criteria Met?	Comment
		requirement of 15% was used. The %RSD values for all target analytes in the calibration were less than 15%. Therefore, the initial calibration met method acceptance criteria.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** With the exceptions listed in Table 2, the percent differences (%Ds) for all CCCs in the initial calibration verifications (ICVs) and continuing calibrations (CCALs) were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 20%.
Internal Standard (VOCs)	Yes	Recoveries for the internal standards in field samples were within the applicable acceptance limits. Therefore, data qualification based on internal standards was not necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate	Yes	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. The LCS recoveries and LCS/LCSD relative percent differences (RPDs) were within the QAPP acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Package Completeness	Yes	The results are usable as qualified for the project objective. The data are 100% complete.

> - Greater Than
< - Less Than
≤ - Less Than or Equal to
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCCs – Calibration Check Compounds
COC – Chain of Custody
GRO – Gasoline Range Organics
ICV – Initial Calibration Verification
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
NA – Not Applicable
QAPP – Quality Assurance Project Plan
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
VOA – Volatile Organic Analysis
VOCs – Volatile Organic Compounds

Table 1: Trip Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
TRIPBLANK-LT06 (L800773) TU904-MW17-NT01 TU904-MW20-ND01 TU904-MW21-NT01 TU904-MW13-NT01 TU904-MW01-NT01 TU904-MW08-DT01 TU904-MW08-NT01 **(L800806)** TU518-MW05-NT01 TU518-MW08-NT01 TU518-MW04-NT01 TU518-MW07-NT01 TU518-MW06-NT01 **(L800817)** TU508-MW01-NT01	Methylene Chloride	1.42 µg/L	The associated methylene chloride results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U TB-I).

Associated Samples	Analyte	Concentration	Qualification
TU508-MW02-NT01 TU508-MW03-NT01 TU508-MW04-NT01 TU508-MW05-NT01 TU508-MW06-NT01 TU508-MW07-NT01 SS018-MW16-NT01 SS018-MW16-DT01 **(L800823)** TU503-MW01-NT01 TU503-MW02-DT01 TU503-MW02-NT01 TU503-MW03-NT01 TU503-MW04-NT01 TU503-TMW12-NT01			
TRIPBLANK-LT07 **(L800773)** TU904-MW11-NT01 TU904-MW07-NT01 TU904-MW18-NT01 TU904-MW16-NT01 TU904-MW15-NT01 TU904-MW10-NT01 TU904-MW03-NT01 TU904-MW02-NT01 TU904-MW04-NT01 TU904-MW14-NT01 TU904-MW19-NT01 TU904-MW06-NT01 **(L800830)** FIELD BLANK-FT11		1.44 µg/L	

< - Less Than
TB – Trip Blank
µg/L – Micrograms per Liter
U – Non-detect
I – Indeterminate Bias

Table 2: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
TRIPBLANK-LT06 TRIPBLANK-LT07 FIELD BLANK-FT07 FIELD BLANK-FT11	4-Methyl-2-pentanone	-23.8 (±20)	As the potential bias was considered to be low, the associated 4-methyl-2-pentanone results were qualified as estimated (UJ CCAL-L).

± - Plus or minus
L – Low Bias
%D – Percent Difference
UJ – Estimated
CCAL – Continuing Calibration

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800830-01

Site ID :

Project # : 60425210.23446543

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TRIPBLANK-LT06

Collected By : Katie Abbott
Collection Date : 11/09/15 00:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/15/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/15/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/15/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/15/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/15/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/15/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/15/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/15/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/15/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/15/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/15/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/15/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/15/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/15/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/15/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/15/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/15/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/15/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/15/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/15/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/15/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/15/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/15/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/15/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/15/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/15/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/15/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/15/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/15/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/15/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/15/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/15/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/15/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/15/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/15/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/15/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/15/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/15/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/15/15	1
Methylene Chloride F SQL-I	75-09-2	1.42	1	2.50	5	ug/l	J	8260B	11/15/15	1
4-Methyl-2-pentanone (MIBK) VJ CCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/15/15	1

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Mt. Juliet, TN 37122
(615) 758-5858
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TRIPBLANK-LT06

Collected By : Katie Abbott
Collection Date : 11/09/15 00:00

ESC Sample # : L800830-01

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/15/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/15/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/15/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/15/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/15/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/15/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/15/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/15/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/15/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/15/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/15/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/15/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/15/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/15/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/15/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/15/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/15/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/15/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/15/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/15/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/15/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	11/15/15	1
Dibromofluoromethane	1868-53-7	101.				% Rec.		8260B	11/15/15	1
4-Bromofluorobenzene	460-00-4	99.2				% Rec.		8260B	11/15/15	1

U = Not Detected at the LOD
Note:
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800830-02

Site ID :

Project # : 60425210.23446543

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TRIPBLANK-LT07

Collected By : Katie Abbott
Collection Date : 11/11/15 00:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/15/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/15/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/15/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/15/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/15/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/15/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/15/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/15/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/15/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/15/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/15/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/15/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/15/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/15/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/15/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/15/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/15/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/15/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/15/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/15/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/15/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/15/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/15/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/15/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/15/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/15/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/15/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/15/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/15/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/15/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/15/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/15/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/15/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/15/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/15/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/15/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/15/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/15/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/15/15	1
Methylene Chloride FSQ1-I	75-09-2	1.44	1	2.50	5	ug/l	J	8260B	11/15/15	1
4-Methyl-2-pentanone (MIBK) VSCCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/15/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : TRIPBLANK-LT07

Collected By : Katie Abbott
Collection Date : 11/11/15 00:00

ESC Sample # : L800830-02

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/15/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/15/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/15/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/15/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/15/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/15/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/15/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/15/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/15/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/15/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/15/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/15/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/15/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/15/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/15/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/15/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/15/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/15/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/15/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/15/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/15/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	100.				% Rec.		8260B	11/15/15	1
Dibromofluoromethane	1868-53-7	100.				% Rec.		8260B	11/15/15	1
4-Bromofluorobenzene	460-00-4	94.0				% Rec.		8260B	11/15/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT07

Collected By : Katie Abbott
Collection Date : 11/11/15 17:40

ESC Sample # : L800830-03

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/15/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/15/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/15/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/15/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/15/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/15/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/15/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/15/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/15/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/15/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/15/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/15/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/15/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/15/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/15/15	1
Chloroform F SQL-I	67-66-3	1.88	0.324	2.50	5	ug/l	J	8260B	11/15/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/15/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/15/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/15/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/15/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/15/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/15/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/15/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/15/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/15/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/15/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/15/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/15/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/15/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/15/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/15/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/15/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/15/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/15/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/15/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/15/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/15/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/15/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/15/15	1
Methylene Chloride F SQL-I	75-09-2	1.98	1	2.50	5	ug/l	J	8260B	11/15/15	1
4-Methyl-2-pentanone (MIBK) USCCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/15/15	1

U = Not Detected at the LOD
Note:
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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800830-03

Site ID :

Project # : 60425210.23446543

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT07

Collected By : Katie Abbott
Collection Date : 11/11/15 17:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/15/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/15/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/15/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/15/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/15/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/15/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/15/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/15/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/15/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/15/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/15/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/15/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/15/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/15/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/15/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/15/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/15/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/15/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/15/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/15/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/15/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	107.				% Rec.		8260B	11/15/15	1
Dibromofluoromethane	1868-53-7	99.7				% Rec.		8260B	11/15/15	1
4-Bromofluorobenzene	460-00-4	102.				% Rec.		8260B	11/15/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L800830-04

Date Received : November 13, 2015
Description : Holloman AFB

Site ID :

Sample ID : FIELD BLANK-FT11

Project # : 60425210.23446543

Collected By : Katie Abbott
Collection Date : 11/02/15 10:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/15/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/15/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/15/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/15/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/15/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/15/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/15/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/15/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/15/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/15/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/15/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/15/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/15/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/15/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/15/15	1
Chloroform FSQL-I	67-66-3	1.76	0.324	2.50	5	ug/l	J	8260B	11/15/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/15/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/15/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/15/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/15/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/15/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/15/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/15/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/15/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/15/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/15/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/15/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/15/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/15/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/15/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/15/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/15/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/15/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/15/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/15/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/15/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/15/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/15/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/15/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/15/15	1
Methylene Chloride UTB-I	75-09-2	2.12	~~1~~ 2.12	2.50	5	ug/l	J	8260B	11/15/15	1
4-Methyl-2-pentanone (MIBK) USCCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/15/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 13, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT11

Collected By : Katie Abbott
Collection Date : 11/02/15 10:00

ESC Sample # : L800830-04

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/15/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/15/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/15/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/15/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/15/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/15/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/15/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/15/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/15/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/15/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/15/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/15/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/15/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/15/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/15/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/15/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/15/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/15/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/15/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/15/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/15/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/15/15	1
Dibromofluoromethane	1868-53-7	102.				% Rec.		8260B	11/15/15	1
4-Bromofluorobenzene	460-00-4	106.				% Rec.		8260B	11/15/15	1

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Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L801101
Sampling Event Dates: November 12, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Katie Abbott, URS Project Chemist
Date Completed: February 11, 2016
Peer Reviewer: Sheri Fling, URS Project Quality Assurance Manager (QAM)

The table below summarizes the data package and sample identifications discussed in this data review.

Field Identification	Sample Type	Lab Identification	Matrix	Analyses					
				VOCs	SVOCs	PAHs	Total Metals	Dissolved Metals	TDS
TU506-MW01-NT01	SA	L801101-01	Water	X	X	X	X	---	X
TU506-MW01-ND01	SA	L801101-02	Water	---	---	---	---	X	---
TU506-MW02-NT01	SA	L801101-03	Water	X	X	X	X	---	X
TU506-MW02-ND01	SA	L801101-04	Water	---	---	---	---	X	---
TU506-MW03-NT01	SA	L801101-05	Water	X	X	X	X	---	X
TU506-MW03-ND01	SA	L801101-06	Water	---	---	---	---	X	---
TU506-MW04-NT01	SA	L801101-07	Water	X	X	X	X	---	X
TU506-MW04-ND01	SA	L801101-08	Water	---	---	---	---	X	---
TU506-MW05-NT01	SA	L801101-09	Water	X^m	X^m	X^m	X^m	---	X
TU506-MW05-ND01*	SA	L801101-10	Water	---	---	---	---	X^m	---

Sample Type: SA – Sample
X^m - Matrix Spike/Matrix Spike Duplicate
Analyses: TDS – Total Dissolved Solids (SM2540C)
Total/Dissolved Metals – Antimony, Arsenic, Cadmium, Chromium, Cobalt, Lead, Nickel, Selenium, Silver, Thallium, Mercury, Aluminum, Barium, Beryllium, Copper, Manganese, Vanadium, Zinc (6020/7470A)
PAHs – Polynuclear Aromatic Hydrocarbons (8270C SIM)
SIM – Selective Ion Monitoring
SVOCs – Semivolatile Organic Compounds (8270C)
VOCs – Volatile Organic Compounds (8260B)
*Sample ID corrected to reflect the proper nomenclature.

The data review was conducted in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14;

Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

General Overall Assessment:

_____ Data are usable without qualification.
_____ Data are usable with qualification (noted below).
__X__ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any laboratory case narrative comments concerning data qualification were addressed in the table below.

Trace level detects, reported between the method detection limit (MDL) and the reporting limit (LOQ), have been qualified as estimated (F SQL-I). All other occurrences of data qualification are covered in the following table.

Review Parameter	Criteria Met?	Comment
Chain of Custody & Sample Receipt	No	The samples were received by ESC Lab Sciences in good condition and were consistent with the accompanying chain of custody (COC). The cooler temperatures upon receipt were within the recommended ≤6 degrees Celsius (°C) temperature range. The samples were shipped to the laboratory with the volatile organic analysis (VOA) vials for the volatile organic compounds (VOCs) analysis in one cooler and the other sample containers (e.g., metals) in separate coolers. A complete signed original COC was included in each of the coolers with a footnote that stated the following: the circled analyses represent those analyses for which bottles are contained in this cooler. However, upon arrival at the laboratory, sample receiving discarded one of the two COCs submitted for each sample assuming one COC was a duplicate. As this had no impact on sample login or reporting of results, data qualification was not necessary. Trip blanks samples were included in each cooler containing samples to be analyzed for VOCs and gasoline range organics (GROs). However, upon receipt the trip blank samples and the field blank samples were logged into two data packages and therefore, not reported with the samples from the same cooler. The associated trip blanks were identified based on the field notes and qualification was only extended to results for those samples shipped in the same cooler as the trip blank. The field blanks were assessed collectively and any resultant qualification was discussed in Section 4.4 of the validation report. The laboratory incorrectly logged samples TU506-MW05-ND01 as TU506-MW05ND-01. The sample identification (ID) was corrected on the data sheets and in the electronic database to reflect the proper nomenclature.
Reporting	Yes	**Revised Reports** Revised reports were required to remove 2-chloronaphthalene from the polynuclear aromatic hydrocarbon (PAH) analyte list and to correct the methyl cyclohexane results. **Method 8260B (VOCs)** During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed

Review Parameter	Criteria Met?	Comment
		version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference spectra taken from the instrument calibration, the analyst was not seeing the improper alignment of spectra noted in the data package during his/her review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding. **Method 8270C Semivolatile Organic Compounds (SVOCs)** The results for 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene were not reported by Method 8270C SVOCs but were reported by Method 8260B VOCs. As the detection limits (DLs), limits of detection (LODs), and limits of quantitation (LOQs) are lower by Method 8260B, further action was not necessary. The laboratory noted 4-methylphenol cannot be reported as 3 & 4-methylphenol coelute during the analysis; therefore, the analytes are reported together and 3&4-methylphenol on the data sheets and in the electronic database. **Method 7470A** Dissolved mercury was requested on the COC, but not performed by the laboratory.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method Blank • Continuing Calibration Blank	No	With the exceptions listed in Table 1, target analytes were not detected within the method or calibration blanks.
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate TU506-MW05-NT01 (Total Metals, VOCs, SVOCs, PAHs) TU506-MW05 -ND01 (6020 Dissolved Metals) • Total vs. Partial Analyses (Metals)	No	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the quality assurance project plan (QAPP) requirement of one per twenty samples. With the exception listed in Table 2, the MS/MSD recoveries and relative percent differences (RPDs) met quality control criteria. Results in the native sample greater than four times the concentration of the spike added during digestions/extractions are not considered to be a representative measure of accuracy. Further action with respect to spike recovery evaluation or qualification of data was not considered necessary. Consistent with standard operating procedure (SOP) 14, when MS/MSD issues accounted for less than 35% of the MS/MSD analyses conducted, applicable data qualification was limited to qualification of the parent sample of the affected analyte. When >35% of the MS/MSD results did not meet criteria, evaluation was extended to all associated samples. See Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation. **Total vs. Partial Analyses (Metals)** Consistent with SOP 14, results for the total analysis of a particular analyte should be greater than the results for a partial analyte of that analyte. The following criteria were used to evaluate the total versus dissolved results:

Review Parameter	Criteria Met?	Comment
		• In instances where the value for a partial analysis exceed that for a total analysis and both of the results are >5xLOQ, the criterion utilized is that the two values should agree within ±30%. • In instances where the value for a partial analysis exceeds that for a total analysis and either of the results is 5xLOQ, the absolute difference between the results is compared against an evaluation criterion of 2xLOQ. The total metal sample results and associated dissolved sample results met the concentration-dependent criteria.
Metals Only • Serial Dilution TU506-MW05-NT01 (Total Mercury) TU506-MW05 -ND01 (6020 Dissolved Metals) • Post Digestion Spike TU506-MW05-NT01 (Total Metals) TU506-MW05 -ND01 (6020 Dissolved Metals)	No	**Serial Dilution (Metals Only)** Consistent with the method, only the results that were greater than 50 times their respective DLs were appropriate for comparing to the serial dilution evaluation criterion. All percent differences (%Ds) between the original sample results and the results obtained from the sample-diluted 1:5 were ≤10%. **Post Digestion Spike (PDS) (Metals Only)** With the exceptions listed in Table 3, all PDS recoveries were within the acceptance limits.
Method Quality Control • Surrogates (VOCs, PAHs, SVOCs)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank None in this package • Field Duplicate None in this package • Equipment Blank None in this package • Field Blank None in this package	NA	**Trip Blank** A trip blank sample was submitted with the coolers; it was reported and evaluated in separate data packages (L800830 and L801106). **Field Duplicate** The frequency of field duplicates met the QAPP requirement of one per twenty samples. A field duplicate was not submitted with the data package. Consistent with SOP 14, when field duplicate issues accounted for less than 35% of the field duplicate analyses conducted, applicable data qualification was limited to qualification of the parent sample for the affected analyte. When >35% of the field duplicate results did not meet criteria, evaluation was extended to all associated samples. See Section 4.3 of the data validation report for overall qualifiers resulting from the field duplicate evaluation. **Equipment Blank** As dedicated equipment was used to collect these samples, an equipment blank was not submitted for this sampling event. Further action was not necessary. **Field Blank** The frequency of field blanks met the QAPP requirement of one per twenty samples. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.

Review Parameter	Criteria Met?	Comment
LODs met?	No	Due to dilutions, several total and dissolved metals results were reported as non-detect or estimated at elevated LODs. See Section 3.6 of the validation report for further discussion.
Other Parameters	Yes	Naphthalene (8260B and 8270C- PAHs) and hexachloro-1,3-butadiene and 1,2,4-trichlorobenzene (8260B and 8270C) were analyzed by multiple methods. Results were selected for reporting using the following criteria: • If both results were non-detect, the non-detect result with the lower DL was selected. • If both results were reported as detected, the higher detected result was selected for reporting. • If one result was reported as non-detect and the other result was reported as detected, the detected result was selected for reporting.
Initial Calibration	Yes	**Methods 8260B VOCs & 8270C SVOCs** A minimum relative response factor (RRF) of 0.05 was used for the system performance check compounds (SPCCs) and all SPCCs met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a requirement of 15% was used. The %RSD values for all target analytes in the calibration were less than 15%. Therefore, the initial calibration met method acceptance criteria. **Method 8270C PAHs** The %RSD values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **Method 6020 (Inductively Coupled Plasma Mass Spectrometer (ICPMS) Metals) & 7470A Mercury** The initial calibrations (ICALs) were performed in association with the samples reported in this package. The relationship between instrument response and concentration was established with a blank and at least five standards. The calibrations were verified with the analysis of an initial calibration verification (ICV) standard. All metals were recovered within the method acceptance range of 90-110%. **Total Dissolved Solids (TDS)** ICALs are not required per the method for TDS.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** With the exceptions listed in Table 4, the %Ds for all CCCs in the ICVs and continuing calibrations (CCALs) were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 20%. **Methods 8270C SVOCs & 8270C PAHs** With the exceptions listed in Table 4, the %D values for all target analytes in the calibration were less than 20%. **Method 6020 (ICPMS Metals)** Calibration verification analyses were conducted at the proper frequency. All metals were recovered within the Department of Defense (DoD)

Review Parameter	Criteria Met?	Comment
		Quality Systems Manual (QSM) version 4.2 low level acceptance range of 80-120% and the method medium/high acceptance range of 90-110%. **Method 7470A Mercury** Calibration verification analyses were conducted at the proper frequency. All results were recovered within the DoD QSM version 4.2 acceptance range of 90-110%. A low level calibration verification is not required per DoD QSM version 4.2; therefore, laboratory limits were used. **TDS** Calibration verifications are not required for TDS.
Interference Check Standard (Metals Only)	Yes	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 80-120% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs. The interferent elements aluminum, calcium, iron, and magnesium were present in most samples in this data package at concentrations greater than or equal to those in the ICSs. As such, these samples were evaluated for positive and negative biases suggested by the ICS A. Data qualification was issued if the absolute value of the ICS A result was greater than the DL and it suggested a positive or negative bias which accounted for more than 25% of associated sample results or LODs. (Note: The ICS A solution only contains the interferent elements aluminum, calcium, iron, and magnesium so any positive or negative result for other analytes is inferred to be a bias potentially caused by one or more of the interferent elements present).
Internal Standard (VOCs/PAHs/Metals (6020))	Yes	Recoveries for the internal standards in field samples were within the applicable acceptance limits. Therefore, data qualification based on internal standards was not necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate	No	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. With the exceptions listed in Table 5, all of the LCS recoveries and LCS/LCSD RPDs were within the QAPP acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Package Completeness	No	With the exception of the benzoic acid results, which were qualified as unusable due to LCS/LCSD recoveries <10%, the results are usable as qualified for the project objective. The data are 99% complete.

> - Greater Than
< - Less Than
≤ - Less Than or Equal to
± - Plus or Minus
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCCs – Calibration Check Compounds
COC – Chain of Custody
DLs – Detection Limits
DoD – Department of Defense
GRO – Gasoline Range Organics
ICAL – Initial Calibration
ICPMS - Inductively Coupled Plasma Mass Spectrometry
ICS – Interference Check Standard
ICV – Initial Calibration Verification
ID - Identification
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
LOQ – Limit of Quantitation
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
PAHs – Polynuclear Aromatic Hydrocarbons
PDS – Post Digestion Spike
QAPP – Quality Assurance Project Plan
QSM – Quality Systems Manual
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
SVOCs – Semivolatile Organic Compounds
TDS – Total Dissolved Solids
VOA – Volatile Organic Analysis
VOCs – Volatile Organic Compounds

Table 1: Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
Total Metals			
MB Batch WG829546 TU506-MW01-NT01 TU506-MW02-NT01 TU506-MW03-NT01 TU506-MW04-NT01 TU506-MW05-NT01	Aluminum	2.69 µg/L	None. The associated aluminum results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
CCB WG829546 TU506-MW01-NT01 TU506-MW02-NT01 TU506-MW03-NT01 TU506-MW04-NT01 TU506-MW05-NT01		0.31 µg/L	
CCB WG829546 TU506-MW05-NT01		0.096 µg/L	
Dissolved Metals			
MB Batch WG829937 TU506-MW01-ND01 TU506-MW02-ND01 TU506-MW03-ND01 TU506-MW04-ND01 TU506-MW05ND-01	Dissolved Aluminum	16.1 µg/L	The associated dissolved aluminum results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Dissolved Antimony	0.438 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Dissolved Chromium	0.952 µg/L	
	Dissolved Copper	0.740 µg/L	
PAHs			
MB Batch WG829719 TU506-MW01-NT01 TU506-MW02-NT01 TU506-MW03-NT01 TU506-MW04-NT01 TU506-MW05-NT01	Benzo(a)anthracene	0.00622 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Benzo(b)fluoranthene	0.00212 µg/L	
	Benzo(g,h,i)perylene	0.00232 µg/L	

> - Greater Than
< - Less Than
µg/L – Micrograms per Liter
CCB – Continuing Calibration Blank
I – Indeterminate Bias
MB – Method Blank
PAHs – Polynuclear Aromatic Hydrocarbons
U – Non-detect

Table 2: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
SVOCs				
TU506-MW05-NT01	4-Nitroaniline	**123/123** (35-120)	0.16 (30)	As the potential bias was considered to be high, and the associated 4-nitroanailine result for sample TU506-MW05-NT01 was reported as non-detect, data qualification was not considered necessary.

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
PAHs				
TU506-MW05-NT01	2-Methylnaphthylene	**108/106** (45-105)	1.96 (20)	As the potential bias was considered to be high, and the associated results for sample TU506-MW05-NT01 were reported as non-detect, data qualification was not considered necessary.
	Acenaphthene	**112/111** (45-110)	0.59 (20)	
	Acenaphthylene	**119/117** (50-105)	1.52 (20)	
	Anthracene	**123/121** (55-110)	1.23 (20)	
	Benzo(a)anthracene	**123/123** (55-110)	0.4 (20)	
	Benzo(b)pyrene	**125/121** (55-110)	3.31 (20)	
	Benzo(b)fluoranthene	**124**/111 (45-110)	11 (20)	
	Chrysene	**119/117** (55-110)	2.87 (20)	
	Fluoranthene	**126/123** (55-115)	2.27 (20)	
	Fluorene	**114/112** (50-110)	1.15 (20)	
	Indeno (1,2,3-c,d)pyrene	**126**/122 (45-125)	3.18 (20)	
	Naphthalene	**101**/100 (40-100)	1.22 (20)	
	Phenanthrene	**116**/114 (50-115)	1.57 (20)	
Total Metals				
TU506-MW05-NT01	Zinc	**58/61** (80-120)	3 (30)	As the potential bias was considered to be low, the associated zinc result for sample TU506-MW05-NT01 was qualified as estimated (J MS-L).
Dissolved Metals				
TU506-MW05-ND01	Dissolved Antimony	**79**/81 (80-120)	1 (30)	As the potential bias was considered to be low, the associated dissolved antimony result for sample TU506-MW05-ND01 was qualified as estimated (J MS-L).
	Dissolved Arsenic	**126/124** (80-120)	1 (30)	As the potential bias was considered to be high, the associated detected dissolved arsenic result for sample TU506-MW05-ND01 was qualified as estimated (J MS-H).
	Dissolved Beryllium	**126/132** (80-120)	5 (30)	As the potential bias was considered to be high, and the associated results for sample TU506-MW05-ND01 were reported as non-detect, data qualification was not considered necessary.
	Dissolved Chromium	**125/126** (80-120)	1 (30)	
	Dissolved Cobalt	**125/126** (80-120)	1 (30)	
	Dissolved Copper	**125/128** (80-120)	2 (30)	

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
	Dissolved Lead	**131/148** (80-120)	4 (30)	
	Dissolved Selenium	**122/123** (80-120)	1 (30)	As the potential bias was considered to be high, the associated detected dissolved results for sample TU506-MW05-ND01 were qualified as estimated (J MS-H).
	Dissolved Vanadium	**131/138** (80-120)	3 (30)	

%R – Percent Recoveries H – High Bias J – Estimated
L – Low Bias MS/MSD – Matrix Spike Matrix Spike Duplicate
PAHs – Polynuclear Aromatic Hydrocarbons RPD – Relative Percent Difference SVOCs – Semivolatile Organic Compounds
Bold indicates a recovery or RPD outside of acceptance limit

Table 3: Post-Digestion Spike Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	Qualification
Total Metals			
TU506-MW05-NT01	Mercury	**154** (75-125)	As the potential bias was considered to be high, and the associated mercury result was reported as non-detect, data qualification was not considered necessary.

%R – Percent Recovery
Bold indicates a recovery or RPD outside of acceptance limit

Table 4: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
VOCs			
TU506-MW01-NT01 TU506-MW02-NT01 TU506-MW03-NT01 TU506-MW04-NT01 TU506-MW05-NT01	4-Methyl-2-pentanone	-22.1 (±20)	As the potential bias was considered to be low, the associated 4-methyl-2-pentanone results were qualified as estimated (UJ CCAL-L).
SVOCs			
TU506-MW01-NT01 TU506-MW02-NT01 TU506-MW03-NT01 TU506-MW04-NT01 TU506-MW05-NT01	n-Nitrosodimethylamine	+74.6 (±20)	As the potential bias was considered to be high, and the associated samples were reported as non-detect, data qualification was not considered necessary.
	Bis(2-chloroethyl)ether	+42.4 (±20)	
	3&4-Methyl Phenol	-45 (±20)	As the potential bias was considered to be low, the associated 3&4-methyl phenol results were qualified as estimated (UJ CCAL-L).

± - Plus or minus %D – Percent Difference CCAL – Continuing Calibration
L – Low Bias SVOCs – Semivolatile Organic Compounds UJ – Estimated
VOCs – Volatile Organic Compounds

Table 5: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
VOCs				
LCS WG829391 TU506-MW01-NT01 TU506-MW02-NT01 TU506-MW03-NT01 TU506-MW04-NT01 TU506-MW05-NT01	1,2-Dichlorobenzene	**121**/111 (70-20)	8.62 (30)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.
SVOCs				
LCS WG829391 TU506-MW01-NT01 TU506-MW02-NT01 TU506-MW03-NT01 TU506-MW04-NT01 TU506-MW05-NT01	Benzoic Acid	10/**0** (10-125)	**200** (30)	As the RPD was outside of control limits, and the percent recovery was <10%, the associated non-detect benzoic acid results were qualified as unusable (R).
PAHs				
LCS WG829719 TU506-MW01-NT01 TU506-MW02-NT01 TU506-MW03-NT01 TU506-MW04-NT01 TU506-MW05-NT01	2-Methylnaphthalene	97.7/**109** (45-105)	10.6 (20)	As the potential bias was considered to be high, the associated detected results for sample TU506-MW01-NT01 were qualified as estimated (J LCS-H).
	Acenaphthylene	104/**108** (50-105)	4.12 (20)	
	Anthracene	**112/116** (55-110)	3.6 (20)	
	Benzo(a)anthracene	110/**113** (55-110)	2.96 (20)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.
	Benzo(a)pyrene	**112/119** (55-110)	6.39 (20)	
	Chrysene	**112/119** (55-110)	6.3 (20)	
	Fluoranthene	115/**120** (55-115)	4.19 (20)	
	Fluorene	106/**112** (50-110)	5.11 (20)	
	Indeno(1,2,3-c,d)pyrene	117/**126** (45-125)	7.23 (20)	
	Naphthalene	99.4/**103** (40-100)	3.99 (20)	

% - Percent
%R – Percent Recoveries
< - Less Than
H – High Bias
J – Estimated
LCS – Laboratory Control Sample
PAHs – Polynuclear Aromatic Hydrocarbons
R – Unusable
RPD – Relative Percent Difference
SVOCs – Semivolatile Organic Compounds
VOCs – Volatile Organic Compounds
Bold indicates a recovery outside of acceptance limits.

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-01

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW01-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 13:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	3310000	2820	5000	10000	ug/l		2540 C-	11/19/15	1
Aluminum F SQL-I	7429-90-5	81.8	20	500.	1000	ug/l	J	6020	11/20/15	10
Antimony	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/20/15	10
Arsenic	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/20/15	10
Barium F SQL-I	7440-39-3	20.1	3.6	10.0	50	ug/l	J	6020	11/20/15	10
Beryllium	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/20/15	10
Cadmium	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/20/15	10
Chromium	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/20/15	10
Copper	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/20/15	10
Cobalt	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/20/15	10
Lead F SQL-I	7439-92-1	3.02	2.4	5.00	20	ug/l	J	6020	11/20/15	10
Manganese	7439-96-5	137.	2.5	5.00	50	ug/l		6020	11/20/15	10
Nickel	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/20/15	10
Selenium	7782-49-2	77.6	3.8	10.0	20	ug/l		6020	11/20/15	10
Silver	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/20/15	10
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/20/15	10
Vanadium	7440-62-2	U	1.8	5.00	50	ug/l		6020	11/20/15	10
Zinc	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/20/15	10
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/20/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	7.52	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide F SQL-I	75-15-0	0.300	0.275	0.500	1	ug/l	J	8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1

U = Not Detected at the LOD
Note:
The reported analytical results relate only to the sample submitted.
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Reported: 11/23/15 09:46 Revised: 02/02/16 20:53

KA 2/11/16

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

ESC Sample # : L801101-01

Site ID :

Sample ID : TU506-MW01-NT01

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/12/15 13:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) UJ CCAL	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	104.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	96.0				% Rec.		8260B	11/17/15	1

U = Not Detected at the LOD
Note:
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-01

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW01-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 13:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	92.5				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene FJ LE SQL, LCS-H	120-12-7	0.0498	0.014	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Acenaphthene	83-32-9	0.333	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene J LCS, MS-H	208-96-8	0.218	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00851~~ 0.00250	~~0.0041~~ 0.00851	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene FJ SQL, LCS-H	206-44-0	0.0440	0.0157	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Fluorene J LCS-H	86-73-7	0.542	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene J LCS-H	91-20-3	1.97	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	0.322	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene FJ SQL-I	129-00-0	0.0466	0.0117	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	35.2	0.00821	0.0250	0.25	ug/l		8270C-S	11/18/15	1
2-Methylnaphthalene FJ SQL, ~~MS~~ LCS-H	91-57-6	0.0308	0.00902	0.0250	0.25	ug/l	J	8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	92.7				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	108.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	118.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/17/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/17/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/17/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/17/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/17/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/17/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/17/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/17/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/17/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/17/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/17/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/17/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/17/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/17/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/17/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/17/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/17/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-01

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW01-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 13:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/17/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/17/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/17/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/17/15	1
Di-n-butyl phthalate F SQL-I	84-74-2	0.274	0.266	1.00	3	ug/l	J	8270C	11/17/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/17/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/17/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/17/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	11/17/15	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/17/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/17/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dinitrophenol UJ D-I	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/17/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/17/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/17/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/17/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/17/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/17/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/17/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/17/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/17/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/17/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/17/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/17/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/17/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/17/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	49.9				% Rec.		8270C	11/17/15	1
Phenol-d5	4165-62-2	33.4				% Rec.		8270C	11/17/15	1
Nitrobenzene-d5	4165-60-0	58.8				% Rec.		8270C	11/17/15	1
2-Fluorobiphenyl	321-60-8	64.0				% Rec.		8270C	11/17/15	1
2,4,6-Tribromophenol	118-79-6	90.5				% Rec.		8270C	11/17/15	1
p-Terphenyl-d14	1718-51-0	84.3				% Rec.		8270C	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-02

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW01-ND01

Collected By : Katie Abbott
Collection Date : 11/12/15 13:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved U MB-I	7429-90-5	~~69.8~~ 100	~~20~~ 69.8	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	19.9	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Lead,Dissolved F SQL-I	7439-92-1	3.09	2.4	5.00	20	ug/l	J	6020	11/18/15	10
Manganese,Dissolved	7439-96-5	150.	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved	7440-62-2	U	1.8	5.00	50	ug/l		6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-03

Date Received : November 14, 2015
Description : Hollman AFB

Site ID :

Sample ID : TU506-MW02-NT01

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/12/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	2440000	2820	5000	10000	ug/l		2540 C-	11/19/15	1
Aluminum	7429-90-5	U	20	500.	1000	ug/l		6020	11/20/15	10
Antimony	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/20/15	10
Arsenic F SQL-I	7440-38-2	6.73	2.5	5.00	20	ug/l	J	6020	11/20/15	10
Barium F SQL-I	7440-39-3	20.4	3.6	10.0	50	ug/l	J	6020	11/20/15	10
Beryllium	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/20/15	10
Cadmium	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/20/15	10
Chromium	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/20/15	10
Copper	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/20/15	10
Cobalt	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/20/15	10
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/20/15	10
Manganese F SQL-I	7439-96-5	3.04	2.5	5.00	50	ug/l	J	6020	11/20/15	10
Nickel	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/20/15	10
Selenium F SQL-I	7782-49-2	6.60	3.8	10.0	20	ug/l	J	6020	11/20/15	10
Silver	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/20/15	10
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/20/15	10
Vanadium	7440-62-2	112.	1.8	5.00	50	ug/l		6020	11/20/15	10
Zinc	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/20/15	10
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/20/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 11:10

ESC Sample # : L801101-03

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) 03 ccal-4	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	97.7				% Rec.		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-03

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	96.0				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00728~~ 0.0250	~~0.0041~~ 0.00728	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene U MB-I	205-99-2	~~0.00270~~ 0.0250	~~0.00212~~ 0.00270	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(g,h,i)perylene U MB-I	191-24-2	~~0.00230~~ 0.0250	~~0.00227~~ 0.00230	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene F SQL-I	90-12-0	0.0111	0.00821	0.0250	0.25	ug/l	J	8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	99.2				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	106.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	107.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/17/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/17/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/17/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/17/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/17/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/17/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/17/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/17/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/17/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/17/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/17/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/17/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/17/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/17/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/17/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/17/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/17/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-03

Date Received : November 14, 2015
Description : Hollman AFB

Site ID :

Sample ID : TU506-MW02-NT01

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/12/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/17/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/17/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/17/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/17/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/17/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/17/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/17/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/17/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/17/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/17/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/17/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dinitrophenol VJ D-1	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/17/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/17/15	1
3&4-Methyl Phenol VJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/17/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/17/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/17/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/17/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/17/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/17/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/17/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/17/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/17/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/17/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/17/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/17/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	42.0				% Rec.		8270C	11/17/15	1
Phenol-d5	4165-62-2	32.5				% Rec.		8270C	11/17/15	1
Nitrobenzene-d5	4165-60-0	51.6				% Rec.		8270C	11/17/15	1
2-Fluorobiphenyl	321-60-8	60.4				% Rec.		8270C	11/17/15	1
2,4,6-Tribromophenol	118-79-6	88.9				% Rec.		8270C	11/17/15	1
p-Terphenyl-d14	1718-51-0	75.9				% Rec.		8270C	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-04

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW02-ND01

Collected By : Katie Abbott
Collection Date : 11/12/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved U MB-I	7429-90-5	~~38.9~~ 500	~~20~~ 38.9	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL,MS-H	7440-38-2	9.08	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	17.7	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL,MS-H	7782-49-2	5.98	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	125.	1.8	5.00	50	ug/l		6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 14:40

ESC Sample # : L801101-05

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	3080000	2820	5000	10000	ug/l		2540 C-	11/19/15	1
Aluminum F SQL-I	7429-90-5	128.	20	500.	1000	ug/l	J	6020	11/20/15	10
Antimony	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/20/15	10
Arsenic F SQL-I	7440-38-2	8.98	2.5	5.00	20	ug/l	J	6020	11/20/15	10
Barium F SQL-I	7440-39-3	23.8	3.6	10.0	50	ug/l	J	6020	11/20/15	10
Beryllium	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/20/15	10
Cadmium	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/20/15	10
Chromium	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/20/15	10
Copper	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/20/15	10
Cobalt	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/20/15	10
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/20/15	10
Manganese F SQL-I	7439-96-5	44.1	2.5	5.00	50	ug/l	J	6020	11/20/15	10
Nickel	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/20/15	10
Selenium F SQL-I	7782-49-2	4.70	3.8	10.0	20	ug/l	J	6020	11/20/15	10
Silver	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/20/15	10
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/20/15	10
Vanadium	7440-62-2	79.8	1.8	5.00	50	ug/l		6020	11/20/15	10
Zinc F SQL-I	7440-66-6	206.	25.6	50.0	250	ug/l	J	6020	11/20/15	10
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/20/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform ~~F SQL-I~~ U FB-I	67-66-3	~~0.738~~ 3.50	~~0.324~~ 0.738	2.50	5	ug/l	J	8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 14:40

ESC Sample # : L801101-05

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) USCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene DNR	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	97.1				% Rec.		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

ESC Sample # : L801101-05

Site ID :

Sample ID : TU506-MW03-NT01

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/12/15 14:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	94.9				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00614~~ 0.0250	~~0.0041~~ 0.0014	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	94.3				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	107.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	107.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/17/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/17/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/17/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/17/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/17/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/17/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/17/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/17/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/17/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/17/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/17/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/17/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/17/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/17/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/17/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/17/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/17/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 14:40

ESC Sample # : L801101-05

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/17/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/17/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/17/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/17/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/17/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/17/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/17/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/17/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/17/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/17/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/17/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dinitrophenol UJ D-L	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/17/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/17/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/17/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/17/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/17/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/17/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/17/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/17/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/17/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/17/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/17/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/17/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/17/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/17/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	47.1				% Rec.		8270C	11/17/15	1
Phenol-d5	4165-62-2	32.3				% Rec.		8270C	11/17/15	1
Nitrobenzene-d5	4165-60-0	56.3				% Rec.		8270C	11/17/15	1
2-Fluorobiphenyl	321-60-8	57.1				% Rec.		8270C	11/17/15	1
2,4,6-Tribromophenol	118-79-6	65.7				% Rec.		8270C	11/17/15	1
p-Terphenyl-d14	1718-51-0	68.3				% Rec.		8270C	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-06

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW03-ND01

Collected By : Katie Abbott
Collection Date : 11/12/15 14:40

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved U MB-I	7429-90-5	~~34.1~~ 500	~~20~~ 34.1	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL,MS-H	7440-38-2	10.7	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved R SQL-I	7440-39-3	20.9	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SQL,MS-H	7782-49-2	5.46	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved F MS-H	7440-62-2	90.4	1.8	5.00	50	ug/l		6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-07

Date Received : November 14, 2015
Description : Hollman AFB

Site ID :

Sample ID : TU506-MW04-NT01

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/12/15 14:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	2580000	2820	5000	10000	ug/l		2540 C-	11/19/15	1
Aluminum F SQL-I	7429-90-5	143.	20	500.	1000	ug/l	J	6020	11/20/15	10
Antimony	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/20/15	10
Arsenic F SQL-I	7440-38-2	2.54	2.5	5.00	20	ug/l	J	6020	11/20/15	10
Barium F SQL-I	7440-39-3	36.6	3.6	10.0	50	ug/l	J	6020	11/20/15	10
Beryllium	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/20/15	10
Cadmium	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/20/15	10
Chromium	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/20/15	10
Copper	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/20/15	10
Cobalt	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/20/15	10
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/20/15	10
Manganese F SQL-I	7439-96-5	3.68	2.5	5.00	50	ug/l	J	6020	11/20/15	10
Nickel	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/20/15	10
Selenium F SQL-I	7782-49-2	7.00	3.8	10.0	20	ug/l	J	6020	11/20/15	10
Silver	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/20/15	10
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/20/15	10
Vanadium F SQL-I	7440-62-2	22.6	1.8	5.00	50	ug/l	J	6020	11/20/15	10
Zinc F SQL-I	7440-66-6	29.8	25.6	50.0	250	ug/l	J	6020	11/20/15	10
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/20/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform ~~F SQL-I~~ U FB-I	67-66-3	~~1.47~~ 2.50	~~0.324~~ 1.47	2.50	5	ug/l	J	8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1

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Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 14:10

ESC Sample # : L801101-07

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) USCCAL	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene DNR	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	97.7				% Rec.		8260B	11/17/15	1

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Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-07

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 14:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	93.6				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene U MB-J	56-55-3	~~0.00839~~ 0.0250	~~0.0041~~ 0.00839	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene U MB-J	205-99-2	~~0.00716~~ 0.0250	~~0.00312~~ 0.00716	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(g,h,i)perylene U MB-J	191-24-2	~~0.00664~~ 0.0250	~~0.00227~~ 0.00664	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	94.7				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	107.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	106.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/17/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/17/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/17/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/17/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/17/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/17/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/17/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/17/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/17/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/17/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/17/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/17/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/17/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/17/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/17/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/17/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/17/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/17/15	1

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February 02, 2016

Date Received : November 14, 2015
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Sample ID : TU506-MW04-NT01

Collected By : Katie Abbott
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ESC Sample # : L801101-07

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/17/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/17/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/17/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/17/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/17/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/17/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/17/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/17/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/17/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/17/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/17/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dinitrophenol UJ 0-1	51-28-5	U	3.25	5.00	10	ug/l	J3	8270C	11/17/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/17/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/17/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/17/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/17/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/17/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/17/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/17/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/17/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/17/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/17/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/17/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/17/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/17/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	47.6				% Rec.		8270C	11/17/15	1
Phenol-d5	4165-62-2	31.3				% Rec.		8270C	11/17/15	1
Nitrobenzene-d5	4165-60-0	57.7				% Rec.		8270C	11/17/15	1
2-Fluorobiphenyl	321-60-8	57.2				% Rec.		8270C	11/17/15	1
2,4,6-Tribromophenol	118-79-6	74.3				% Rec.		8270C	11/17/15	1
p-Terphenyl-d14	1718-51-0	69.3				% Rec.		8270C	11/17/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW04-ND01

Collected By : Katie Abbott
Collection Date : 11/12/15 14:10

ESC Sample # : L801101-08

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved U MB-I	7429-90-5	~~51.3~~ 500	~~20~~ 51.3	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SOL, MS-H	7440-38-2	3.27	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SOL-I	7440-39-3	41.2	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved FJ SOL, MS-H	7782-49-2	8.24	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	27.3	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW05-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 12:10

ESC Sample # : L801101-09

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	3030000	2820	5000	10000	ug/l		2540 C-	11/19/15	1
Aluminum F SQL-I	7429-90-5	54.6	20	500.	1000	ug/l	J	6020	11/20/15	10
Antimony ~~FJ MS-L~~	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/20/15	10
Arsenic ~~FJ SQL, MS-H~~ F SQL-I	7440-38-2	6.88	2.5	5.00	20	ug/l	J	6020	11/20/15	10
Barium F SQL-I	7440-39-3	31.5	3.6	10.0	50	ug/l	J	6020	11/20/15	10
Beryllium	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/20/15	10
Cadmium	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/20/15	10
Chromium	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/20/15	10
Copper	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/20/15	10
Cobalt	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/20/15	10
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/20/15	10
Manganese	7439-96-5	122.	2.5	5.00	50	ug/l		6020	11/20/15	10
Nickel F SQL-I	7440-02-0	5.29	3.5	10.0	20	ug/l	J	6020	11/20/15	10
Selenium ~~FJ SQL, MS-H~~ F SQL-I	7782-49-2	6.91	3.8	10.0	20	ug/l	J	6020	11/20/15	10
Silver	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/20/15	10
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/20/15	10
Vanadium ~~J MS-H~~	7440-62-2	60.2	1.8	5.00	50	ug/l		6020	11/20/15	10
Zinc FJ SQL, MS-L	7440-66-6	29.0	25.6	50.0	250	ug/l	JJ6	6020	11/20/15	10
Mercury	7439-97-6	U	0.049	0.0800	0.2	ug/l		7470A	11/20/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801101-09

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW05-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 12:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) USCCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/17/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	95.1				% Rec.		8260B	11/17/15	1

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URS
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February 02, 2016

ESC Sample # : L801101-09

Date Received : November 14, 2015
Description : Hollman AFB

Site ID :

Sample ID : TU506-MW05-NT01

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/12/15 12:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	94.7				% Rec.		8260B	11/17/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene	56-55-3	U	0.0041	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	95.1				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	110.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	109.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/17/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/17/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/17/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/17/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/17/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/17/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/17/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/17/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/17/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/17/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/17/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/17/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/17/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/17/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/17/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/17/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/17/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW05-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 12:10

ESC Sample # : L801101-09

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/17/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/17/15	1
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/17/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/17/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/17/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/17/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/17/15	1
Di-n-octyl phthalate	117-84-0	U	0.278	1.00	3	ug/l		8270C	11/17/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/17/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/17/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/17/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.62	5.00	10	ug/l		8270C	11/17/15	1
2,4-Dinitrophenol	51-28-5	U	3.25	5.00	10	ug/l		8270C	11/17/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/17/15	1
3&4-Methyl Phenol US CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/17/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/17/15	1
4-Nitrophenol	100-02-7	U	2.01	5.00	10	ug/l		8270C	11/17/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/17/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/17/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/17/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/17/15	1
4-Nitroaniline	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/17/15	1
Pentachlorophenol	87-86-5	U	0.313	5.00	10	ug/l		8270C	11/17/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/17/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/17/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.297	5.00	10	ug/l		8270C	11/17/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	38.7				% Rec.		8270C	11/17/15	1
Phenol-d5	4165-62-2	25.9				% Rec.		8270C	11/17/15	1
Nitrobenzene-d5	4165-60-0	48.5				% Rec.		8270C	11/17/15	1
2-Fluorobiphenyl	321-60-8	62.9				% Rec.		8270C	11/17/15	1
2,4,6-Tribromophenol	118-79-6	68.5				% Rec.		8270C	11/17/15	1
p-Terphenyl-d14	1718-51-0	77.4				% Rec.		8270C	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Hollman AFB

Sample ID : TU506-MW05~~ND-01~~ -ND01

Collected By : Katie Abbott
Collection Date : 11/12/15 12:10

ESC Sample # : L801101-10

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved U MS-I	7429-90-5	~~49.7~~ 500	~~20~~ 49.7	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved J MS-H	7440-36-0	20.6	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	7.44	2.5	5.00	20	ug/l	JJ5	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	25.2	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l	J5	6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l	J5	6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l	J5	6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l	J5	6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	122.	2.5	5.00	50	ug/l	J5	6020	11/18/15	10
Nickel,Dissolved F SQL-I	7440-02-0	8.30	3.5	10.0	20	ug/l	J	6020	11/18/15	10
Selenium,Dissolved FJ SQL, MS-H	7782-49-2	7.97	3.8	10.0	20	ug/l	J	6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	63.2	1.8	5.00	50	ug/l	J5	6020	11/18/15	10
Zinc,Dissolved ~~UJ MS-I~~	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10

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Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L801106
Sampling Event Dates: November 11-13, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Katie Abbott, URS Project Chemist
Date Completed: February 11, 2016
Peer Reviewer: Sheri Fling, URS Project Quality Assurance Manager (QAM)

The table below summarizes the data package and sample identifications discussed in this data review.

Field Identification	Sample Type	Lab Identification	Matrix	Analyses						
				VOCs	GRO	SVOCs	PAHs	Total Metals	Dissolved Metals	TDS
FIELD BLANK-FT01	FB	L801106-01	Water	---	X	---	---	---	---	---
FIELD BLANK-FT02	FB	L801106-02	Water	---	X	---	---	---	---	---
FIELD BLANK-FT03	FB	L801106-03	Water	---	X	---	---	---	---	---
FIELD BLANK-FT08	FB	L801106-04	Water	X	---	---	---	---	---	---
FIELD BLANK-FT09	FB	L801106-05	Water	X	---	---	---	---	---	---
FIELD BLANK-FT10	FB	L801106-06	Water	X	---	---	---	---	---	---
FIELD BLANK-FT12	FB	L801106-07	Water	X	---	---	---	---	---	---
TRIP BLANK-LT01	TB	L801106-08	Water	---	X	---	---	---	---	---
TRIP BLANK-LT02	TB	L801106-09	Water	---	X	---	---	---	---	---
TRIP BLANK-LT08	TB	L801106-10	Water	X	---	---	---	---	---	---
TRIP BLANK-LT09	TB	L801106-11	Water	X	---	---	---	---	---	---
TRIP BLANK-LT10	TB	L801106-12	Water	X	---	---	---	---	---	---

Sample Type: FB – Field Blank TB – Trip Blank
X^m - Matrix Spike/Matrix Spike Duplicate

Analyses: GRO – Gasoline Range Organics (8015D)
TDS – Total Dissolved Solids (SM2540C)
Total/Dissolved Metals – Antimony, Arsenic, Cadmium, Chromium, Cobalt, Lead, Nickel, Selenium, Silver, Thallium, Mercury, Aluminum, Barium, Beryllium, Copper, Manganese, Vanadium, Zinc (6020/7470A)
PAHs – Polynuclear Aromatic Hydrocarbons (8270C SIM)
SIM – Selective Ion Monitoring
SVOCs – Semivolatile Organic Compounds (8270C)
VOCs – Volatile Organic Compounds (8260B)

The data review was conducted in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-

889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14; Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

General Overall Assessment:

_____ Data are usable without qualification.
__X__ Data are usable with qualification (noted below).
_____ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any laboratory case narrative comments concerning data qualification were addressed in the table below.

Trace level detects, reported between the method detection limit (MDL) and the reporting limit (LOQ), have been qualified as estimated (F SQL-I). All other occurrences of data qualification are covered in the following table.

Review Parameter	Criteria Met?	Comment
Chain of Custody & Sample Receipt	No	The samples were received by ESC Lab Sciences in good condition and were consistent with the accompanying chain of custody (COC). The cooler temperatures upon receipt were within the recommended ≤6 degrees Celsius (°C) temperature range. The samples were shipped to the laboratory with the volatile organic analysis (VOA) vials for the volatile organic compounds (VOCs) analysis in one cooler and the other sample containers (e.g., metals) in separate coolers. A complete signed original COC was included in each of the coolers with a footnote that stated the following: the circled analyses represent those analyses for which bottles are contained in this cooler. However, upon arrival at the laboratory, sample receiving discarded one of the two COCs submitted for each sample assuming one COC was a duplicate. As this had no impact on sample login or reporting of results, data qualification was not necessary. Trip blanks samples were included in each cooler containing samples to be analyzed for VOCs and gasoline range organics (GROs). However, upon receipt the trip blank samples and the field blank samples were logged into two data packages and therefore, not reported with the samples from the same cooler. The associated trip blanks were identified based on the field notes and qualification was only extended to results for those samples shipped in the same cooler as the trip blank.
Reporting	Yes	**Revised Reports** A revised report was required to correct the methyl cyclohexane results. **Method 8260B (VOCs)** During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference spectra taken from the instrument calibration, the analyst was not seeing the

Review Parameter	Criteria Met?	Comment
		improper alignment of spectra noted in the data package during his/her review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method Blank	Yes	Target analytes were not detected within the method blanks.
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate None in this package	NA	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the quality assurance project plan (QAPP) requirement of one per twenty samples. An MS/MSD was not performed on a sample from this data package. Consistent with standard operating procedure (SOP) 14, when MS/MSD issues accounted for less than 35% of the MS/MSD analyses conducted, applicable data qualification was limited to qualification of the parent sample of the affected analyte. When >35% of the MS/MSD results did not meet criteria, evaluation was extended to all associated samples. See Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation.
Method Quality Control • Surrogates (VOCs)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank TRIP BLANK-LT01 TRIP BLANK-LT02 TRIP BLANK-LT08 TRIP BLANK-LT09 TRIP BLANK-LT10 • Field Duplicate None in this package • Equipment Blank None in this package • Field Blank FIELD BLANK-FT01 FIELD BLANK-FT02 FIELD BLANK-FT03 FIELD BLANK-FT08 FIELD BLANK-FT09 FIELD BLANK-FT10 FIELD BLANK-FT12	Yes	**Trip Blank** Target analytes were not detected in the trip blanks. **Field Duplicate** The frequency of field duplicates met the QAPP requirement of one per twenty samples. A field duplicate was not submitted with the data package. Consistent with SOP 14, when field duplicate issues accounted for less than 35% of the field duplicate analyses conducted, applicable data qualification was limited to qualification of the parent sample for the affected analyte. When >35% of the field duplicate results did not meet criteria, evaluation was extended to all associated samples. See Section 4.3 of the data validation report for overall qualifiers resulting from the field duplicate evaluation. **Equipment Blank** As dedicated equipment was used to collect these samples, an equipment blank was not submitted for this sampling event. Further action was not necessary. **Field Blank** The frequency of field blanks met the QAPP requirement of one per twenty samples. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.

Review Parameter	Criteria Met?	Comment
LODs met?	Yes	No results were reported as non-detect at elevated limits of detection (LODs).
Initial Calibration	Yes	**Method 8260B VOCs** A minimum relative response factor (RRF) of 0.05 was used for the system performance check compounds (SPCCs) and all SPCCs met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a requirement of 15% was used. The %RSD values for all target analytes in the calibration were less than 15%. Therefore, the initial calibration met method acceptance criteria. **Method 8015D Gasoline Range Organics (GRO)** The relationship between instrument response and concentration was established with a blank and at least five standards for each analyte. The %RSD over the initial calibrations curve satisfied the method requirement of <15%. Therefore, the initial calibration met method acceptance criteria.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** With the exception listed in Table 1, the percent differences (%Ds) for all CCCs in the initial calibration verifications (ICVs) and continuing calibrations (CCALs) were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 20%. **Method 8015D GRO** The %Ds for GRO in the ICVs and CCALs were less than 15%. Data qualification was not necessary.
Internal Standard (VOCs)	Yes	Recoveries for the internal standards in field samples were within the applicable acceptance limits. Therefore, data qualification based on internal standards was not necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate	No	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. With the exceptions listed in Table 2, all of the LCS recoveries and LCS/LCSD RPDs were within the QAPP acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Package Completeness	Yes	The results are usable as qualified for the project objective. The data are 100% complete.

> - Greater Than
< - Less Than
≤ - Less Than or Equal to
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCCs – Calibration Check Compounds
COC – Chain of Custody
GRO – Gasoline Range Organics
ICV – Initial Calibration Verification
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
NA – Not Applicable
QAPP – Quality Assurance Project Plan
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
VOA – Volatile Organic Analysis
VOCs – Volatile Organic Compounds

Table 1: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
FIELD BLANK-FT08 FIELD BLANK-FT09 FIELD BLANK-FT10 FIELD BLANK-FT12 TRIP BLANK-LT08 TRIP BLANK-LT09 TRIP BLANK-LT10	4-Methyl-2-pentanone	-22.1 (±20)	As the potential bias was considered to be low, the associated 4-methyl-2-pentanone results were qualified as estimated (UJ CCAL-L).

± - Plus or minus
%D – Percent Difference
CCAL – Continuing Calibration
L – Low Bias
UJ – Estimated

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
VOCs				
LCS WG829391 TU506-MW01-NT01 TU506-MW02-NT01 TU506-MW03-NT01 TU506-MW04-NT01 TU506-MW05-NT01	1,2-Dichlorobenzene	**121**/111 (70-20)	8.62 (30)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.

%R – Percent Recoveries
LCS – Laboratory Control Sample
RPD – Relative Percent Difference
VOCs – Volatile Organic Compounds
Bold indicates a recovery outside of acceptance limits.

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-01

Site ID :

Project # : 60425210.23446543

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT01

Collected By : Katie Abbott
Collection Date : 11/11/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	31.4	50.0	100	ug/l		8015D/G	11/18/15	1
Surrogate Recovery-%										
a,a,a-Trifluorotoluene(FID)	98-08-8	99.4				% Rec.		8015D/G	11/18/15	1

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Note:
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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-02

Site ID :

Project # : 60425210.23446543

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT02

Collected By : Katie Abbott
Collection Date : 11/12/15 10:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	31.4	50.0	100	ug/l		8015D/G	11/18/15	1
Surrogate Recovery-%										
a,a,a-Trifluorotoluene(FID)	98-08-8	99.8				% Rec.		8015D/G	11/18/15	1

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-03

Date Received : November 14, 2015
Description : Holloman AFB

Site ID :

Sample ID : FIELD BLANK-FT03

Project # : 60425210.23446543

Collected By : Katie Abbott
Collection Date : 11/12/15 12:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	31.4	50.0	100	ug/l		8015D/G	11/18/15	1
Surrogate Recovery-%										
a,a,a-Trifluorotoluene(FID)	98-08-8	101.				% Rec.		8015D/G	11/18/15	1

U = Not Detected at the LOD
Note:
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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-04

Site ID :

Project # : 60425210.23446543

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT08

Collected By : Katie Abbott
Collection Date : 11/11/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform F SQL-1	67-66-3	3.61	0.324	2.50	5	ug/l	J	8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) VCCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1

U = Not Detected at the LOD
Note:
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT08

Collected By : Katie Abbott
Collection Date : 11/11/15 12:20

ESC Sample # : L801106-04

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	101.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	92.6				% Rec.		8260B	11/17/15	1
4-Bromofluorobenzene	460-00-4	93.6				% Rec.		8260B	11/17/15	1

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Note:
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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT09

Collected By : Katie Abbott
Collection Date : 11/12/15 10:25

ESC Sample # : L801106-05

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform F Sal-1	67-66-3	3.64	0.324	2.50	5	ug/l	J	8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) UJ CCAL-1	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-05

Site ID :

Project # : 60425210.23446543

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT09

Collected By : Katie Abbott
Collection Date : 11/12/15 10:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	94.7				% Rec.		8260B	11/17/15	1
4-Bromofluorobenzene	460-00-4	94.9				% Rec.		8260B	11/17/15	1

U = Not Detected at the LOD
Note:
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-06

Site ID :

Project # : 60425210.23446543

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT10

Collected By : Katie Abbott
Collection Date : 11/12/15 12:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform F 5ul-1	67-66-3	3.71	0.324	2.50	5	ug/l	J	8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) VSCCAL-C	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-06

Site ID :

Project # : 60425210.23446543

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT10

Collected By : Katie Abbott
Collection Date : 11/12/15 12:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	95.3				% Rec.		8260B	11/17/15	1
4-Bromofluorobenzene	460-00-4	95.9				% Rec.		8260B	11/17/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT12

Collected By : Katie Abbott
Collection Date : 11/13/15 12:55

ESC Sample # : L801106-07

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform FSQL-1	67-66-3	3.35	0.324	2.50	5	ug/l	J	8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) VJccAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : FIELD BLANK-FT12

Collected By : Katie Abbott
Collection Date : 11/13/15 12:55

ESC Sample # : L801106-07

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	94.6				% Rec.		8260B	11/17/15	1
4-Bromofluorobenzene	460-00-4	95.8				% Rec.		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-08

Date Received : November 14, 2015
Description : Holloman AFB

Site ID :

Sample ID : TRIP BLANK-LT01

Project # : 60425210.23446543

Collected By : Katie Abbott
Collection Date : 11/11/15 00:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	31.4	50.0	100	ug/l		8015D/G	11/21/15	1
Surrogate Recovery-%										
a,a,a-Trifluorotoluene(FID)	98-08-8	97.8				% Rec.		8015D/G	11/21/15	1

U = Not Detected at the LOD
Note:
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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-09

Date Received : November 14, 2015
Description : Holloman AFB

Site ID :

Sample ID : TRIP BLANK-LT02

Project # : 60425210.23446543

Collected By : Katie Abbott
Collection Date : 11/12/15 00:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	31.4	50.0	100	ug/l		8015D/G	11/21/15	1
Surrogate Recovery-%										
a,a,a-Trifluorotoluene(FID)	98-08-8	97.1				% Rec.		8015D/G	11/21/15	1

U = Not Detected at the LOD
Note:
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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TRIP BLANK-LT08

Collected By : Katie Abbott
Collection Date : 11/11/15 00:00

ESC Sample # : L801106-10

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) VS CCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TRIP BLANK-LT08

Collected By : Katie Abbott
Collection Date : 11/11/15 00:00

ESC Sample # : L801106-10

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	95.3				% Rec.		8260B	11/17/15	1
4-Bromofluorobenzene	460-00-4	94.8				% Rec.		8260B	11/17/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-11

Site ID :

Project # : 60425210.23446543

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TRIP BLANK-LT09

Collected By : Katie Abbott
Collection Date : 11/12/15 00:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) VSCCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-11

Date Received : November 14, 2015
Description : Holloman AFB

Site ID :

Sample ID : TRIP BLANK-LT09

Project # : 60425210.23446543

Collected By : Katie Abbott
Collection Date : 11/12/15 00:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	97.1				% Rec.		8260B	11/17/15	1
4-Bromofluorobenzene	460-00-4	96.7				% Rec.		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TRIP BLANK-LT10

Collected By : Katie Abbott
Collection Date : 11/12/15 00:00

ESC Sample # : L801106-12

Site ID :

Project # : 60425210.23446543

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) USCLAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1

U = Not Detected at the LOD
Note:
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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801106-12

Site ID :

Project # : 60425210.23446543

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TRIP BLANK-LT10

Collected By : Katie Abbott
Collection Date : 11/12/15 00:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	96.2				% Rec.		8260B	11/17/15	1
4-Bromofluorobenzene	460-00-4	97.0				% Rec.		8260B	11/17/15	1

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Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L801109
Sampling Event Dates: November 13, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Katie Abbott, URS Project Chemist
Date Completed: February 11, 2016
Peer Reviewer: Sheri Fling, URS Project Quality Assurance Manager (QAM)

The table below summarizes the data package and sample identifications discussed in this data review.

Field Identification	Sample Type	Lab Identification	Matrix	Analyses					
				VOCs	SVOCs	PAHs	Total Metals	Dissolved Metals	TDS
TU503-TMW13-NT01	SA	L801109-01	Water	X	---	---	---	---	---
TU503-TMW14-NT01	SA	L801109-02	Water	X	---	---	---	---	---

Sample Type: SA – Sample
X^m - Matrix Spike/Matrix Spike Duplicate
Analyses: TDS – Total Dissolved Solids (SM2540C)
Total/Dissolved Metals – Antimony, Arsenic, Cadmium, Chromium, Cobalt, Lead, Nickel, Selenium, Silver, Thallium, Mercury, Aluminum, Barium, Beryllium, Copper, Manganese, Vanadium, Zinc (6020/7470A)
PAHs – Polynuclear Aromatic Hydrocarbons (8270C SIM)
SIM – Selective Ion Monitoring
SVOCs – Semivolatile Organic Compounds (8270C)
VOCs – Volatile Organic Compounds (8260B)

The data review was conducted in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14; Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

General Overall Assessment:

_____ Data are usable without qualification.
__X__ Data are usable with qualification (noted below).
_____ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any laboratory case narrative comments concerning data qualification were addressed in the table below.

Trace level detects, reported between the method detection limit (MDL) and the reporting limit (LOQ), have been qualified as estimated (F SQL-I). All other occurrences of data qualification are covered in the following table.

Review Parameter	Criteria Met?	Comment
Chain of Custody & Sample Receipt	No	The samples were received by ESC Lab Sciences in good condition and were consistent with the accompanying chain of custody (COC). The cooler temperatures upon receipt were within the recommended ≤6 degrees Celsius (°C) temperature range. The samples were shipped to the laboratory with the volatile organic analysis (VOA) vials for the volatile organic compounds (VOCs) analysis in one cooler and the other sample containers (e.g., metals) in separate coolers. A complete signed original COC was included in each of the coolers with a footnote that stated the following: the circled analyses represent those analyses for which bottles are contained in this cooler. However, upon arrival at the laboratory, sample receiving discarded one of the two COCs submitted for each sample assuming one COC was a duplicate. As this had no impact on sample login or reporting of results, data qualification was not necessary. Trip blanks samples were included in each cooler containing samples to be analyzed for VOCs and gasoline range organics (GROs). However, upon receipt the trip blank samples and the field blank samples were logged into two data packages and therefore, not reported with the samples from the same cooler. The associated trip blanks were identified based on the field notes and qualification was only extended to results for those samples shipped in the same cooler as the trip blank. The field blanks were assessed collectively and any resultant qualification was discussed in Section 4.4 of the validation report.
Reporting	Yes	**Revised Reports** A revised report was required to correct the methyl cyclohexane results. **Method 8260B (VOCs)** During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference spectra taken from the instrument calibration, the analyst was not seeing the improper alignment of spectra noted in the data package during his/her review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method Blank	Yes	Target analytes were not detected within the method blanks.

Review Parameter	Criteria Met?	Comment
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate None in this package	NA	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the quality assurance project plan (QAPP) requirement of one per twenty samples. An MS/MSD was not performed on a sample from this data package. Consistent with standard operating procedure (SOP) 14, when MS/MSD issues accounted for less than 35% of the MS/MSD analyses conducted, applicable data qualification was limited to qualification of the parent sample of the affected analyte. When >35% of the MS/MSD results did not meet criteria, evaluation was extended to all associated samples. See Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation.
Method Quality Control • Surrogates (VOCs)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank None in this package • Field Duplicate None in this package • Equipment Blank None in this package • Field Blank None in this package	NA	**Trip Blank** A trip blank sample was submitted with the coolers; it was reported and evaluated in separate data packages (L800830 and L801106). **Field Duplicate** The frequency of field duplicates met the QAPP requirement of one per twenty samples. A field duplicate was not submitted with the data package. Consistent with SOP 14, when field duplicate issues accounted for less than 35% of the field duplicate analyses conducted, applicable data qualification was limited to qualification of the parent sample for the affected analyte. When >35% of the field duplicate results did not meet criteria, evaluation was extended to all associated samples. See Section 4.3 of the data validation report for overall qualifiers resulting from the field duplicate evaluation. **Equipment Blank** As dedicated equipment was used to collect these samples, an equipment blank was not submitted for this sampling event. Further action was not necessary. **Field Blank** The frequency of field blanks met the QAPP requirement of one per twenty samples. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.
LODs met?	Yes	No results were reported as non-detect at elevated limits of detection (LODs).
Initial Calibration	Yes	**Method 8260B VOCs** A minimum relative response factor (RRF) of 0.05 was used for the system performance check compounds (SPCCs) and all SPCCs met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a

Review Parameter	Criteria Met?	Comment
		requirement of 15% was used. The %RSD values for all target analytes in the calibration were less than 15%. Therefore, the initial calibration met method acceptance criteria.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** With the exception listed in Table 1, the percent differences (%Ds) for all CCCs in the initial calibration verifications (ICVs) and continuing calibrations (CCALs) were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 20%.
Internal Standard (VOCs)	Yes	Recoveries for the internal standards in field samples were within the applicable acceptance limits. Therefore, data qualification based on internal standards was not necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate	No	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. With the exception listed in Table 2, all of the LCS recoveries and LCS/LCSD RPDs were within the QAPP acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Package Completeness	Yes	The results are usable as qualified for the project objective. The data are 100% complete.

> - Greater Than
< - Less Than
≤ - Less Than or Equal to
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCCs – Calibration Check Compounds
COC – Chain of Custody
ICV – Initial Calibration Verification
GRO – Gasoline Range Organics
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
NA – Not Applicable
QAPP – Quality Assurance Project Plan
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
VOA – Volatile Organic Analysis
VOCs – Volatile Organic Compounds

Table 1: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
TU503-TMW13-NT01 TU503-TMW14-NT01	4-Methyl-2-pentanone	-22.1 (±20)	As the potential bias was considered to be low, the associated 4-methyl-2-pentanone results were qualified as estimated (UJ CCAL-L).

± - Plus or minus
L – Low Bias
%D – Percent Difference
UJ – Estimated
CCAL – Continuing Calibration

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
LCS WG829391 TU503-TMW13-NT01 TU503-TMW14-NT01	1,2-Dichlorobenzene	**121**/111 (70-120)	8.62 (30)	As the potential bias was considered to be high, and the associated 1,2-dichlorobenzene results were reported as non-detect, data qualification was not considered necessary.

%R – Percent Recoveries
LCS – Laboratory Control Sample
RPD – Relative Percent Difference
Bold indicates a recovery outside of acceptance limits.

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU503-TMW13-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:20

ESC Sample # : L801109-01

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) VJ CCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1

U = Not Detected at the LOD
Note:
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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU503-TMW13-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:20

ESC Sample # : L801109-01

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	99.1				% Rec.		8260B	11/17/15	1
4-Bromofluorobenzene	460-00-4	98.1				% Rec.		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801109-02

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU503-TMW14-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/17/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/17/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/17/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/17/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/17/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/17/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/17/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/17/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/17/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/17/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/17/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/17/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/17/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/17/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/17/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/17/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/17/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/17/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l	J4	8260B	11/17/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/17/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/17/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/17/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/17/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/17/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/17/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/17/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/17/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/17/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/17/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/17/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/17/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/17/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/17/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/17/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/17/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/17/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/17/15	1
4-Methyl-2-pentanone (MIBK) UJ CCAL-L	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/17/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 02, 2016

ESC Sample # : L801109-02

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU503-TMW14-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/17/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l		8260B	11/23/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/17/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/17/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/17/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/17/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/17/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/17/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/17/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/17/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/17/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/17/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/17/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/17/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/17/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/17/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/17/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/17/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/17/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/17/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/17/15	1
Dibromofluoromethane	1868-53-7	99.5				% Rec.		8260B	11/17/15	1
4-Bromofluorobenzene	460-00-4	94.4				% Rec.		8260B	11/17/15	1

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Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L801110
Sampling Event Dates: November 12, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Katie Abbott, URS Project Chemist
Date Completed: February 12, 2016
Peer Reviewer: Sheri Fling, URS Project Quality Assurance Manager (QAM)

The table below summarizes the data package and sample identifications discussed in this data review.

Field Identification	Sample Type	Lab Identification	Matrix	Analyses					
				VOCs	SVOCs	PAHs	Total Metals	Dissolved Metals	TDS
TU904-TMW01-NT01	SA	L801110-01	Water	X	---	---	---	---	---
TU904-TMW03-NT01	SA	L801110-02	Water	X	---	---	---	---	---

Sample Type: SA – Sample
X^m - Matrix Spike/Matrix Spike Duplicate
Analyses: TDS – Total Dissolved Solids (SM2540C)
Total/Dissolved Metals – Antimony, Arsenic, Cadmium, Chromium, Cobalt, Lead, Nickel, Selenium, Silver, Thallium, Mercury, Aluminum, Barium, Beryllium, Copper, Manganese, Vanadium, Zinc (6020/7470A)
PAHs – Polynuclear Aromatic Hydrocarbons (8270C SIM)
SIM – Selective Ion Monitoring
SVOCs – Semivolatile Organic Compounds (8270C)
VOCs – Volatile Organic Compounds (8260B)

The data review was conducted in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14; Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

General Overall Assessment:

_____ Data are usable without qualification.
__X__ Data are usable with qualification (noted below).
_____ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any laboratory case narrative comments concerning data qualification were addressed in the table below.

Trace level detects, reported between the method detection limit (MDL) and the reporting limit (LOQ), have been qualified as estimated (F SQL-I). All other occurrences of data qualification are covered in the following table.

Review Parameter	Criteria Met?	Comment
Chain of Custody & Sample Receipt	No	The samples were received by ESC Lab Sciences in good condition and were consistent with the accompanying chain of custody (COC). The cooler temperatures upon receipt were within the recommended ≤6 degrees Celsius (°C) temperature range. The samples were shipped to the laboratory with the volatile organic analysis (VOA) vials for the volatile organic compounds (VOCs) analysis in one cooler and the other sample containers (e.g., metals) in separate coolers. A complete signed original COC was included in each of the coolers with a footnote that stated the following: the circled analyses represent those analyses for which bottles are contained in this cooler. However, upon arrival at the laboratory, sample receiving discarded one of the two COCs submitted for each sample assuming one COC was a duplicate. As this had no impact on sample login or reporting of results, data qualification was not necessary. Trip blanks samples were included in each cooler containing samples to be analyzed for VOCs and gasoline range organics (GROs). However, upon receipt the trip blank samples and the field blank samples were logged into two data packages and therefore, not reported with the samples from the same cooler. The associated trip blanks were identified based on the field notes and qualification was only extended to results for those samples shipped in the same cooler as the trip blank. The field blanks were assessed collectively and any resultant qualification was discussed in Section 4.4 of the validation report.
Reporting	Yes	**Revised Reports** A revised report was required to correct the methyl cyclohexane results. **Method 8260B (VOCs)** During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference spectra taken from the instrument calibration, the analyst was not seeing the improper alignment of spectra noted in the data package during his/her review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method Blank	Yes	Target analytes were not detected within the method blanks.

Review Parameter	Criteria Met?	Comment
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate None in this package	NA	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the quality assurance project plan (QAPP) requirement of one per twenty samples. An MS/MSD was not performed on a sample from this data package. Consistent with standard operating procedure (SOP) 14, when MS/MSD issues accounted for less than 35% of the MS/MSD analyses conducted, applicable data qualification was limited to qualification of the parent sample of the affected analyte. When >35% of the MS/MSD results did not meet criteria, evaluation was extended to all associated samples. See Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation.
Method Quality Control • Surrogates (VOCs)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank None in this package • Field Duplicate None in this package • Equipment Blank None in this package • Field Blank None in this package	NA	**Trip Blank** A trip blank sample was submitted with the coolers; it was reported and evaluated in a separate data package. **Field Duplicate** The frequency of field duplicates met the QAPP requirement of one per twenty samples. A field duplicate was not submitted with the data package. Consistent with SOP 14, when field duplicate issues accounted for less than 35% of the field duplicate analyses conducted, applicable data qualification was limited to qualification of the parent sample for the affected analyte. When >35% of the field duplicate results did not meet criteria, evaluation was extended to all associated samples. See Section 4.3 of the data validation report for overall qualifiers resulting from the field duplicate evaluation. **Equipment Blank** As dedicated equipment was used to collect these samples, an equipment blank was not submitted for this sampling event. Further action was not necessary. **Field Blank** The frequency of field blanks met the QAPP requirement of one per twenty samples. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.
LODs met?	Yes	No results were reported as non-detect at elevated limits of detection (LODs).
Initial Calibration	Yes	**Method 8260B VOCs** A minimum relative response factor (RRF) of 0.05 was used for the system performance check compounds (SPCCs) and all SPCCs met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a

Review Parameter	Criteria Met?	Comment
		requirement of 15% was used. The %RSD values for all target analytes in the calibration were less than 15%. Therefore, the initial calibration met method acceptance criteria.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** With the exception listed in Table 1, the percent differences (%Ds) for all CCCs in the initial calibration verifications (ICVs) and continuing calibrations (CCALs) were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 20%.
Internal Standard (VOCs)	Yes	Recoveries for the internal standards in field samples were within the applicable acceptance limits. Therefore, data qualification based on internal standards was not necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate	No	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. With the exception listed in Table 2, all of the LCS recoveries and LCS/LCSD RPDs were within the QAPP acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Package Completeness	Yes	The results are usable as qualified for the project objective. The data are 100% complete.

> - Greater Than
< - Less Than
≤ - Less Than or Equal to
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCCs – Calibration Check Compounds
COC – Chain of Custody
GRO – Gasoline Range Organics
ICV – Initial Calibration Verification
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
NA – Not Applicable
QAPP – Quality Assurance Project Plan
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
VOA – Volatile Organic Analysis
VOCs – Volatile Organic Compounds

Table 1: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
TU904-TMW01-NT01 TU904-TMW03-NT01	Dichlorodifluoromethane	+45.3 (±20)	As the potential bias was considered to be high, and the associated sample results were reported as non-detect, data qualification was not considered necessary.
	2-Butanone (MEK)	+22 (±20)	
	n-Butylbenzene	+21.5 (±20)	
	1,2,4-Trichlorobenzene	+20.7 (±20)	
	Hexachloro-1,3-butadiene	+20.3 (±20)	

± - Plus or minus
%D – Percent Difference

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
LCS WG829608 TU904-TMW01-NT01 TU904-TMW03-NT01	Methyl Cyclohexane	**69.1** (70-130)	NA	As the potential bias was considered to be low, the associated methyl cyclohexane results were qualified as estimated (UJ LCS-L).

%R – Percent Recoveries L – Low Bias LCS – Laboratory Control Sample
RPD – Relative Percent Difference SVOCs – Semivolatile Organic Compounds UJ - Estimated
Bold indicates a recovery outside of acceptance limits.

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801110-01

Date Received : November 14, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU904-TMW01-NT01

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/12/15 12:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/18/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/18/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/18/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/18/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/18/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/18/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/18/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/18/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/18/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/18/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/18/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/18/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/18/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/18/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/18/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/18/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/18/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/18/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/18/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/18/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/18/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/18/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/18/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/18/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/18/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/18/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/18/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/18/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/18/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/18/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/18/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/18/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/18/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/18/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801110-01

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU904-TMW01-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 12:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/18/15	1
Methyl Cyclohexane UJ LCS-L	108-87-2	U	0.38	0.500	1	ug/l	J4	8260B	11/18/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/18/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/18/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/18/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/18/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/18/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/18/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/18/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/18/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/18/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/18/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/18/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/18/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/18/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/18/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/18/15	1
Dibromofluoromethane	1868-53-7	104.				% Rec.		8260B	11/18/15	1
4-Bromofluorobenzene	460-00-4	93.4				% Rec.		8260B	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU904-TMW03-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 12:00

ESC Sample # : L801110-02

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/18/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/18/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/18/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/18/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/18/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/18/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/18/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/18/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/18/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/18/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/18/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/18/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/18/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/18/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/18/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/18/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/18/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/18/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/18/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/18/15	1
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/18/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/18/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/18/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/18/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/18/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/18/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/18/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/18/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/18/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/18/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/18/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/18/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/18/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801110-02

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU904-TMW03-NT01

Collected By : Katie Abbott
Collection Date : 11/12/15 12:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/18/15	1
Methyl Cyclohexane VJ LCS-L	108-87-2	U	0.38	0.500	1	ug/l	J4	8260B	11/18/15	1
Naphthalene	91-20-3	U	1	2.50	5	ug/l		8260B	11/18/15	1
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/18/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/18/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/18/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/18/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/18/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/18/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/18/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/18/15	1
Trichloroethene	79-01-6	3.35	0.398	0.500	1	ug/l		8260B	11/18/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/18/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/18/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/18/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/18/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/18/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/18/15	1
Dibromofluoromethane	1868-53-7	99.5				% Rec.		8260B	11/18/15	1
4-Bromofluorobenzene	460-00-4	100.				% Rec.		8260B	11/18/15	1

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Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L801111
Sampling Event Dates: November 13, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Katie Abbott, URS Project Chemist
Date Completed: February 12, 2016
Peer Reviewer: Sheri Fling, URS Project Quality Assurance Manager (QAM)

The table below summarizes the data package and sample identifications discussed in this data review.

Field Identification	Sample Type	Lab Identification	Matrix	Analyses					
				VOCs	SVOCs	PAHs	Total Metals	Dissolved Metals	TDS
TU515-MW01-NT01	SA	L801111-01	Water	X	X	X	X	---	X
TU515-MW01-ND01	SA	L801111-02	Water	---	---	---	---	X^m	---
TU515-MW02-ND01	SA	L801111-03	Water	---	---	---	---	X	---
TU515-MW02-NT01	SA	L801111-04	Water	X	X	X	X	---	X
TU515-MW03-ND01	SA	L801111-05	Water	---	---	---	---	X	---
TU515-MW03-NT01	SA	L801111-06	Water	X	X	X	X	---	X
TU515-MW04-NT01	SA	L801111-07	Water	X	X	X	X	---	X
TU515-MW04-ND01	SA	L801111-08	Water	---	---	---	---	X	---
TU515-TMW04-ND01	SA	L801111-09	Water	---	---	---	---	X	---
TU515-TMW04-NT01	SA	L801111-10	Water	X	X	X	X	---	X

Sample Type: SA – Sample
X^m - Matrix Spike/Matrix Spike Duplicate
Analyses: TDS – Total Dissolved Solids (SM2540C)
Total/Dissolved Metals – Antimony, Arsenic, Cadmium, Chromium, Cobalt, Lead, Nickel, Selenium, Silver, Thallium, Mercury, Aluminum, Barium, Beryllium, Copper, Manganese, Vanadium, Zinc (6020/7470A)
PAHs – Polynuclear Aromatic Hydrocarbons (8270C SIM)
SIM – Selective Ion Monitoring
SVOCs – Semivolatile Organic Compounds (8270C)
VOCs – Volatile Organic Compounds (8260B)

The data review was conducted in accordance with the Final Interim Measures Work Plan – Appendix A, Sampling and Analysis Plan/Quality Assurance Project Plan: Former Septic System Site TU904 (URS, September 2014); Group 2 Former Underground Storage Sites: AOC-UST-889 (TU515) (URS, September 2014); and Group 3 Former Underground Storage Tank Sites: AOC-UST-221 (TU503), AOC-UST-298 (TU508), AOC-UST-901 (TU506) and AOC-UST-7003 (TU518) (URS, August 2014); data validation standard operating procedure (SOP) 14;

Department of Defense (DoD) Quality Systems Manual version 4.2 (DoD, 2010); and method requirements.

General Overall Assessment:

_____ Data are usable without qualification.
_____ Data are usable with qualification (noted below).
__X__ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any laboratory case narrative comments concerning data qualification were addressed in the table below.

Trace level detects, reported between the method detection limit (MDL) and the reporting limit (LOQ), have been qualified as estimated (F SQL-I). All other occurrences of data qualification are covered in the following table.

Review Parameter	Criteria Met?	Comment
Chain of Custody & Sample Receipt	No	The samples were received by ESC Lab Sciences in good condition and were consistent with the accompanying chain of custody (COC). The cooler temperatures upon receipt were within the recommended ≤6 degrees Celsius (°C) temperature range. The samples were shipped to the laboratory with the volatile organic analysis (VOA) vials for the volatile organic compounds (VOCs) analysis in one cooler and the other sample containers (e.g., metals) in separate coolers. A complete signed original COC was included in each of the coolers with a footnote that stated the following: the circled analyses represent those analyses for which bottles are contained in this cooler. However, upon arrival at the laboratory, sample receiving discarded one of the two COCs submitted for each sample assuming one COC was a duplicate. As this had no impact on sample login or reporting of results, data qualification was not necessary. Trip blanks samples were included in each cooler containing samples to be analyzed for VOCs and gasoline range organics (GROs). However, upon receipt the trip blank samples and the field blank samples were logged into two data packages and therefore, not reported with the samples from the same cooler. The associated trip blanks were identified based on the field notes and qualification was only extended to results for those samples shipped in the same cooler as the trip blank. The field blanks were assessed collectively and any resultant qualification was discussed in Section 4.4 of the validation report.
Reporting	Yes	**Revised Reports** Revised reports were required to remove 2-chloronaphthalene from the polynuclear aromatic hydrocarbon (PAH) analyte list and to correct the methyl cyclohexane results. **Method 8260B (VOCs)** During review of a representative data package selected for full validation, it was noted that improper reference spectra were displayed in the printed version of the data package for Method 8260B. Due to a LIMS limitation, the data package reference spectra were not consistently representative of the actual spectra for the analytes detected. Because the laboratory data review involves the use of NBS reference spectra and not the reference

Review Parameter	Criteria Met?	Comment
		spectra taken from the instrument calibration, the analyst was not seeing the improper alignment of spectra noted in the data package during his/her review at the instrument. The laboratory revised and reissued the data package with correct reference spectral data, consistent with method requirements. Therefore, no further action is necessary as a result of this validation finding. **Method 8270C Semivolatile Organic Compounds (SVOCs)** The results for 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene were not reported by Method 8270C SVOCs but were reported by Method 8260B VOCs. As the detection limits (DLs), limits of detection (LODs), and limits of quantitation (LOQs) are lower by Method 8260B, further action was not necessary. The laboratory noted 4-methylphenol cannot be reported as 3 & 4-methylphenol coelute during the analysis; therefore, the analytes are reported together and 3&4-methylphenol on the data sheets and in the electronic database. **Method 7470A** Total and dissolved mercury was requested on the COC, but not performed by the laboratory.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method Blank • Continuing Calibration Blank	No	With the exceptions listed in Table 1, target analytes were not detected within the method or calibration blanks.
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate TU515-MW01-ND01 (6020 Dissolved Metals) • Total vs. Partial Analyses (Metals)	No	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the quality assurance project plan (QAPP) requirement of one per twenty samples. With the exception listed in Table 2, the MS/MSD recoveries and relative percent differences (RPDs) met quality control criteria. Results in the native sample greater than four times the concentration of the spike added during digestions/extractions are not considered to be a representative measure of accuracy. Further action with respect to spike recovery evaluation or qualification of data was not considered necessary. Consistent with standard operating procedure (SOP) 14, when MS/MSD issues accounted for less than 35% of the MS/MSD analyses conducted, applicable data qualification was limited to qualification of the parent sample of the affected analyte. When >35% of the MS/MSD results did not meet criteria, evaluation was extended to all associated samples. See Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation. **Total vs. Partial Analyses (Metals)** Consistent with SOP 14, results for the total analysis of a particular analyte should be greater than the results for a partial analyte of that analyte. The following criteria were used to evaluate the total versus dissolved results: • In instances where the value for a partial analysis exceed that for a total analysis and both of the results are >5xLOQ, the criterion utilized is that the two values should agree within ±30%.

Review Parameter	Criteria Met?	Comment
		• In instances where the value for a partial analysis exceeds that for a total analysis and either of the results is 5xLOQ, the absolute difference between the results is compared against an evaluation criterion of 2xLOQ. The total metal sample results and associated dissolved sample results met the concentration-dependent criteria.
Metals Only • Serial Dilution TU515-MW01-ND01 (6020 Dissolved Metals)	Yes	**Serial Dilution (Metals Only)** Consistent with the method, only the results that were greater than 50 times their respective DLs were appropriate for comparing to the serial dilution evaluation criterion. All percent differences (%Ds) between the original sample results and the results obtained from the sample-diluted 1:5 were ≤10%.
Method Quality Control • Surrogates (VOCs, PAHs, SVOCs)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank None in this package • Field Duplicate None in this package • Equipment Blank None in this package • Field Blank None in this package	NA	**Trip Blank** A trip blank sample was submitted with the coolers; it was reported and evaluated in separate data packages (L800830 and L801106). **Field Duplicate** The frequency of field duplicates met the QAPP requirement of one per twenty samples. A field duplicate was not submitted with the data package. Consistent with SOP 14, when field duplicate issues accounted for less than 35% of the field duplicate analyses conducted, applicable data qualification was limited to qualification of the parent sample for the affected analyte. When >35% of the field duplicate results did not meet criteria, evaluation was extended to all associated samples. See Section 4.3 of the data validation report for overall qualifiers resulting from the field duplicate evaluation. **Equipment Blank** As dedicated equipment was used to collect these samples, an equipment blank was not submitted for this sampling event. Further action was not necessary. **Field Blank** The frequency of field blanks met the QAPP requirement of one per twenty samples. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.
LODs met?	No	Due to dilutions, several total and dissolved metals results were reported as non-detect or estimated at elevated LODs. See Section 3.6 of the validation report for further discussion.

Review Parameter	Criteria Met?	Comment
Other Parameters	Yes	Naphthalene (8260B and 8270C- PAHs) and hexachloro-1,3-butadiene and 1,2,4-trichlorobenzene (8260B and 8270C) were analyzed by multiple methods. Results were selected for reporting using the following criteria: • If both results were non-detect, the non-detect result with the lower DL was selected. • If both results were reported as detected, the higher detected result was selected for reporting. • If one result was reported as non-detect and the other result was reported as detected, the detected result was selected for reporting.
Initial Calibration	Yes	**Methods 8260B VOCs & 8270C SVOCs** A minimum relative response factor (RRF) of 0.05 was used for the system performance check compounds (SPCCs) and all SPCCs met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a requirement of 15% was used. The %RSD values for all target analytes in the calibration were less than 15%. Therefore, the initial calibration met method acceptance criteria. **Method 8270C PAHs** The %RSD values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **Method 6020 (Inductively Coupled Plasma Mass Spectrometer (ICPMS) Metals) & 7470A Mercury** The initial calibrations (ICALs) were performed in association with the samples reported in this package. The relationship between instrument response and concentration was established with a blank and at least five standards. The calibrations were verified with the analysis of an initial calibration verification (ICV) standard. All metals were recovered within the method acceptance range of 90-110%. **Total Dissolved Solids (TDS)** ICALs are not required per the method for TDS.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** With the exceptions listed in Table 3, the %Ds for all CCCs in the ICVs and continuing calibrations (CCALs) were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 20%. **Methods 8270C SVOCs & 8270C PAHs** With the exceptions listed in Table 3, the %D values for all target analytes in the calibration were less than 20%. **Method 6020 (ICPMS Metals)** Calibration verification analyses were conducted at the proper frequency. All metals were recovered within the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2 low level acceptance range of 80-120% and the method medium/high acceptance range of 90-110%.

Review Parameter	Criteria Met?	Comment
		Method 7470A Mercury Calibration verification analyses were conducted at the proper frequency. All results were recovered within the DoD QSM version 4.2 acceptance range of 90-110%. A low level calibration verification is not required per DoD QSM version 4.2; therefore, laboratory limits were used. **TDS** Calibration verifications are not required for TDS.
Interference Check Standard (Metals Only)	Yes	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 80-120% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs. The interferent elements aluminum, calcium, iron, and magnesium were present in most samples in this data package at concentrations greater than or equal to those in the ICSs. As such, these samples were evaluated for positive and negative biases suggested by the ICS A. Data qualification was issued if the absolute value of the ICS A result was greater than the DL and it suggested a positive or negative bias which accounted for more than 25% of associated sample results or LODs. (Note: The ICS A solution only contains the interferent elements aluminum, calcium, iron, and magnesium so any positive or negative result for other analytes is inferred to be a bias potentially caused by one or more of the interferent elements present).
Internal Standard (VOCs/PAHs/Metals (6020))	Yes	Recoveries for the internal standards in field samples were within the applicable acceptance limits. Therefore, data qualification based on internal standards was not necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate	No	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. With the exceptions listed in Table 4, all of the LCS recoveries and LCS/LCSD RPDs were within the QAPP acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Package Completeness	No	With the exception of the benzoic acid results, which were qualified as unusable due to LCS/LCSD recoveries <10%, the results are usable as qualified for the project objective. The data are 99% complete.

> - Greater Than
< - Less Than
≤ - Less Than or Equal to
± - Plus or Minus
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCCs – Calibration Check Compounds
COC – Chain of Custody
DLs – Detection Limits
DoD – Department of Defense
ICAL – Initial Calibration
ICPMS - Inductively Coupled Plasma Mass Spectrometry
ICS – Interference Check Standard
ICV – Initial Calibration Verification
ID – Identification
GRO – Gasoline Range Organics
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
LOQ – Limit of Quantitation
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
PAHs – Polynuclear Aromatic Hydrocarbons
PDS – Post Digestion Spike
QAPP – Quality Assurance Project Plan
QSM – Quality Systems Manual
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
SVOCs – Semivolatile Organic Compounds
TDS – Total Dissolved Solids
VOA – Volatile Organic Analysis
VOCs – Volatile Organic Compounds

Table 1: Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
Total Metals			
MB Batch WG829546 TU515-MW01-NT01 TU515-MW02-NT01 TU515-MW03-NT01 TU515-MW04-NT01 TU515-TMW04-NT01	Aluminum	2.69 µg/L	None. The associated aluminum results were reported at concentrations >5x the concentration of the blank contamination.
CCB WG829546 TU515-MW01-NT01 TU515-MW02-NT01 TU515-MW03-NT01 TU515-MW04-NT01 TU515-TMW04-NT01		0.31 µg/L	
CCB WG829546 TU515-MW01-NT01 TU515-MW02-NT01 TU515-MW03-NT01 TU515-MW04-NT01 TU515-TMW04-NT01		0.096 µg/L	
Dissolved Metals			
MB Batch WG829547 TU515-MW01-ND01 TU515-MW02-ND01 TU515-MW03-ND01 TU515-MW04-ND01 TU515-TMW04-ND01	Dissolved Aluminum	3.57 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
	Dissolved Antimony	0.407 µg/L	
	Dissolved Chromium	0.701 µg/L	
	Dissolved Nickel	0.470 µg/L	
	Dissolved Vanadium	0.202 µg/L	
SVOCs			
MB Batch WG829779 TU515-MW01-NT01 TU515-MW02-NT01 TU515-MW03-NT01 TU515-MW04-NT01 TU515-TMW04-NT01	Bis(2-ethylhexyl)phthalate	1.05 µg/L	The associated results reported at concentrations <10x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Di-n-octyl phthalate	0.433 µg/L	
PAHs			
MB Batch WG829719 TU515-MW01-NT01 TU515-MW02-NT01 TU515-MW03-NT01 TU515-MW04-NT01 TU515-TMW04-NT01	Benzo(a)anthracene	0.00622 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
	Benzo(g,h,i)perylene	0.00232 µg/L	

> - Greater Than
< - Less Than
µg/L – Micrograms per Liter
CCB – Continuing Calibration Blank
I – Indeterminate Bias
MB – Method Blank
PAHs – Polynuclear Aromatic Hydrocarbons
SVOCs – Semivolatile Organic Compounds
U – Non-detect

Table 2: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
Dissolved Metals				
TU515-MW01-ND01	Dissolved Arsenic	**121**/119 (80-120)	1 (30)	As the potential bias was considered to be high, the associated detected dissolved arsenic result for sample TU515-MW01-ND01 was qualified as estimated (J MS-H).
	Dissolved Beryllium	**124**/113 (80-120)	9 (30)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.
	Dissolved Copper	**121**/119 (80-120)	2 (30)	
	Dissolved Selenium	**121**/109 (80-120)	10 (30)	
	Dissolved Vanadium	**125**/112 (80-120)	8 (30)	As the potential bias was considered to be high, the associated detected dissolved vanadium result for sample TU515-MW01-ND01 was qualified as estimated (J MS-H).

%R – Percent Recoveries H – High Bias J – Estimated
MS/MSD – Matrix Spike Matrix Spike Duplicate RPD – Relative Percent Difference
Bold indicates a recovery or RPD outside of acceptance limit

Table 3: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
VOCs			
TU515-MW01-NT01 TU515-MW02-NT01 TU515-MW03-NT01 TU515-MW04-NT01 TU515-TMW04-NT01	Dichlorodifluoromethane	+45.3 (±20)	As the potential bias was considered to be high, and the associated sample results were reported as non-detect, data qualification was not considered necessary.
	2-Butanone (MEK)	+22 (±20)	
	n-Butylbenzene	+21.5 (±20)	As the potential bias was considered to be high, the associated detected n-butylbenzene result for sample TU515-TMW04-NT01 was qualified as estimated (J CCAL-H).
	1,2,4-Trichlorobenzene	+20.7 (±20)	As the potential bias was considered to be high, and the associated sample results were reported as non-detect, data qualification was not considered necessary.
	Hexachloro-1,3-butadiene	+20.3 (±20)	
SVOCs			
TU515-MW01-NT01 TU515-MW02-NT01 TU515-MW03-NT01 TU515-MW04-NT01 TU515-TMW04-NT01	n-Nitrosodimethylamine	+39.7 (±20)	As the potential bias was considered to be high, and the associated samples were reported as non-detect, data qualification was not considered necessary.
	Bis(2-chloroethyl)ether	+21.4 (±20)	
	3&4-Methyl Phenol	-50.0 (±20)	As the potential bias was considered to be low, the associated 3&4-methyl phenol results were qualified as estimated (UJ CCAL-L).

± - Plus or minus %D – Percent Difference CCAL – Continuing Calibration
H – High Bias UJ/J – Estimated L – Low Bias
SVOCs – Semivolatile Organic Compounds VOCs – Volatile Organic Compounds

Table 4: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
SVOCs				
LCS WG829779 TU515-MW01-NT01 TU515-MW02-NT01 TU515-MW03-NT01 TU515-MW04-NT01 TU515-TMW04-NT01	2,4,6-Trichlorophenol	62.7/**40.9**	**42.2** (30)	As the potential bias was considered to be low, and the RPD was outside of control limits, the associated 2,4,6-trichlorophenol results were qualified as estimated (UJ LCS-L).
	2,4-Dinitrophenol	34.3/15.1	**77.6** (30)	As the RPD was outside of control limits, the associated 2,4-dinitrophenol results were qualified as estimated (UJ LCS-I).
	4,6-Dinitro-2-methylphenol	56.7/**19.6**	**97.3** (30)	As the potential bias was considered to be low, and the RPD was outside of control limits, the associated 4,6-dinitro-2-methylphenol results were qualified as estimated (UJ LCS-L).
	4-Nitroaniline	118/**124**	4.98 (30)	As the potential bias was considered to be low, the associated 4-nitroaniline results were qualified as estimated (UJ LCS-L).
	4-Nitrophenol	26/**8.64**	**100.1** (30)	As the potential bias was considered to be low, and the RPD was outside of control limits, the associated 4-nitrophenol results were qualified as estimated (UJ LCS-L). Data was not considered to be unusable as the average LCS/LCSD %R was within control limits. It was not considered necessary to qualify the result as unusable for the percent recovery <10% since the LCS was within the acceptance limits.
	Benzoic Acid	13.1/**6.19**	**71.4** (30)	As the RPD was outside of control limits, and the percent recovery was <10%, the associated non-detect benzoic acid results were qualified as unusable (R).
	Pentachlorophenol	69.7/**26**	**91.3** (30)	As the potential bias was considered to be low, and the RPD was outside of control limits, the associated pentachlorophenol results were qualified as estimated (UJ LCS-L).
PAHs				
LCS WG829719 TU515-MW01-NT01 TU515-MW02-NT01 TU515-MW03-NT01 TU515-MW04-NT01 TU515-TMW04-NT01	2-Methylnaphthalene	97.7/**109** (45-105)	10.6 (20)	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J LCS-H).
	Acenaphthylene	104/**108** (50-105)	4.12 (20)	
	Anthracene	**112/116** (55-110)	3.6 (20)	
	Benzo(a)anthracene	110/**113** (55-110)	2.96 (20)	As the potential bias was considered to be high, and the associated results were reported as non-detect, data qualification was not considered necessary.
	Benzo(a)pyrene	**112/119** (55-110)	6.39 (20)	
	Chrysene	**112/119** (55-110)	6.3 (20)	
	Fluoranthene	115/**120** (55-115)	4.19 (20)	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J LCS-H).
	Fluorene	106/**112** (50-110)	5.11 (20)	
	Indeno(1,2,3-c,d)pyrene	117/**126** (45-125)	7.23 (20)	As the potential bias was considered to be high, and the associated indeno(1,2,3-cd)pyrene

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
				results were reported as non-detect, data qualification was not considered necessary.
	Naphthalene	99.4/**103** (40-100)	3.99 (20)	As the potential bias was considered to be high, the associated detected naphthalene results were qualified as estimated (J LCS-H).

% - Percent
%R – Percent Recoveries
< - Less Than
H – High Bias
L – Low Bias
LCS – Laboratory Control Sample
PAHs – Polynuclear Aromatic Hydrocarbons
R – Unusable
RPD – Relative Percent Difference
SVOCs – Semivolatile Organic Compounds
UJ/J - Estimated
Bold indicates a recovery outside of acceptance limits.

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW01-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:55

ESC Sample # : L801111-01

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	2840000	2820	5000	10000	ug/l		2540 C-	11/20/15	1
Aluminum F SQL-I	7429-90-5	249.	20	500.	1000	ug/l	J	6020	11/20/15	10
Antimony	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/20/15	10
Arsenic F SQL-I	7440-38-2	12.8	2.5	5.00	20	ug/l	J	6020	11/20/15	10
Barium F SQL-I	7440-39-3	26.7	3.6	10.0	50	ug/l	J	6020	11/20/15	10
Beryllium	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/20/15	10
Cadmium	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/20/15	10
Chromium	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/20/15	10
Copper	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/20/15	10
Cobalt	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/20/15	10
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/20/15	10
Manganese	7439-96-5	111.	2.5	5.00	50	ug/l		6020	11/20/15	10
Nickel	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/20/15	10
Selenium	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/20/15	10
Silver	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/20/15	10
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/20/15	10
Vanadium F SQL-I	7440-62-2	26.5	1.8	5.00	50	ug/l	J	6020	11/20/15	10
Zinc F SQL-I	7440-66-6	59.0	25.6	50.0	250	ug/l	J	6020	11/20/15	10
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/18/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/18/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/18/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/18/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/18/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/18/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/18/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/18/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/18/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/18/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/18/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/18/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/18/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/18/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/18/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/18/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/18/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/18/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/18/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/18/15	1

U = Not Detected at the LOD
Note:
The reported analytical results relate only to the sample submitted.
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Reported: 11/23/15 09:46 Revised: 02/04/16 10:19

KA 2/12/16

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REPORT OF ANALYSIS

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Collected By : Katie Abbott
Collection Date : 11/13/15 11:55

ESC Sample # : L801111-01

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/18/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/18/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/18/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/18/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/18/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/18/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/18/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/18/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/18/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/18/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/18/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/18/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/18/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/18/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/18/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l	J4	8260B	11/18/15	1
Naphthalene ONR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/18/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/18/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/18/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/18/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/18/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/18/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/18/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/18/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/18/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/18/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/18/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/18/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/18/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/18/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/18/15	1
Dibromofluoromethane	1868-53-7	103.				% Rec.		8260B	11/18/15	1
4-Bromofluorobenzene	460-00-4	90.5				% Rec.		8260B	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-01

Date Received : November 14, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU515-MW01-NT01

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/13/15 11:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene	56-55-3	U	0.0041	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene F SQL-I	205-99-2	0.00219	0.00212	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(g,h,i)perylene U MB-I	191-24-2	~~0.00261~~ 0.00261	~~0.00227~~ 0.00261	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	100.				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	110.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	111.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/20/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-01

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW01-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate U MB-I	117-81-7	~~0.875~~ 1.0	~~0.709~~ 0.875	1.00	3	ug/l	J	8270C	11/20/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/20/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.573~~ 1.00	~~0.278~~ 0.573	1.00	3	ug/l	J	8270C	11/20/15	1
1,2,4-Trichlorobenzene ONR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol UJ LCS-I	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/20/15	1
2,4-Dinitrophenol UJ DY-I LCS-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol UJ LCS-L	100-02-7	U	2.01	5.00	10	ug/l	J4J3	8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline UJ LCS-L	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l	J3	8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	54.1				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	38.0				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	57.5				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	66.5				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	75.4				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	73.0				% Rec.		8270C	11/20/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-02

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW01-ND01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-J	7429-90-5	68.2	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL,MS-H	7440-38-2	14.9	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-J	7440-39-3	20.0	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	59.3	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved F SQL-J	7440-02-0	11.4	3.5	10.0	20	ug/l	J	6020	11/18/15	10
Selenium,Dissolved	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL,MS-H	7440-62-2	27.2	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

ESC Sample # : L801111-03

Sample ID : TU515-MW02-ND01

Site ID :

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/13/15 12:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	31.2	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-H	7440-38-2	7.56	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	20.4	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	630.	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SQL, MS-H	7440-62-2	38.2	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-04

Date Received : November 14, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU515-MW02-NT01

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/13/15 12:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	2740000	2820	5000	10000	ug/l		2540 C-	11/20/15	1
Aluminum ~~J~~ F SQL-I	7429-90-5	53.2	20	500.	1000	ug/l	J	6020	11/20/15	10
Antimony	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/20/15	10
Arsenic F SQL-I	7440-38-2	6.00	2.5	5.00	20	ug/l	J	6020	11/20/15	10
Barium F SQL-I	7440-39-3	21.8	3.6	10.0	50	ug/l	J	6020	11/20/15	10
Beryllium	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/20/15	10
Cadmium	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/20/15	10
Chromium	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/20/15	10
Copper	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/20/15	10
Cobalt	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/20/15	10
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/20/15	10
Manganese	7439-96-5	672.	2.5	5.00	50	ug/l		6020	11/20/15	10
Nickel	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/20/15	10
Selenium	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/20/15	10
Silver	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/20/15	10
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/20/15	10
Vanadium F SQL-I	7440-62-2	32.8	1.8	5.00	50	ug/l	J	6020	11/20/15	10
Zinc	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/20/15	10
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/18/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/18/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/18/15	1
Bromodichloromethane F SQL-I	75-27-4	0.546	0.38	0.500	1	ug/l	J	8260B	11/18/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/18/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/18/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/18/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/18/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/18/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/18/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/18/15	1
Chlorodibromomethane F SQL-I	124-48-1	0.453	0.327	0.500	1	ug/l	J	8260B	11/18/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/18/15	1
Chloroform ~~F SQL-I~~ U FB-I	67-66-3	~~0.767~~ 2.50	~~0.324~~ 0.767	2.50	5	ug/l	J	8260B	11/18/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/18/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/18/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/18/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/18/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/18/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/18/15	1

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Dale Flores and Arielle Bisoglio
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8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 12:35

ESC Sample # : L801111-04

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/18/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/18/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/18/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/18/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/18/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/18/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/18/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/18/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/18/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/18/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/18/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/18/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/18/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/18/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/18/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l	J4	8260B	11/18/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/18/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/18/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/18/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/18/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/18/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/18/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/18/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/18/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/18/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/18/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/18/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/18/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/18/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/18/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	103.				% Rec.		8260B	11/18/15	1
Dibromofluoromethane	1868-53-7	99.7				% Rec.		8260B	11/18/15	1
4-Bromofluorobenzene	460-00-4	93.1				% Rec.		8260B	11/18/15	1

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February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW02-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 12:35

ESC Sample # : L801111-04

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene	56-55-3	U	0.0041	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	U	0.00821	0.0250	0.25	ug/l		8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	94.3				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	106.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	107.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/20/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1

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ESC Sample # : L801111-04

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.709	1.00	3	ug/l		8270C	11/20/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/20/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.418~~ 1.00	~~0.270~~ 0.418	1.00	3	ug/l	J	8270C	11/20/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol UJ LCS-L	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/20/15	1
2,4-Dinitrophenol UJ D, LCS-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol UJ LCS-L	100-02-7	U	2.01	5.00	10	ug/l	J4J3	8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline UJ LCS-L	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l	J3	8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	18.6				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	13.5				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	52.6				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	58.3				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	87.0				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	77.6				% Rec.		8270C	11/20/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-05

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW03-ND01

Collected By : Katie Abbott
Collection Date : 11/13/15 10:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SRL-I	7429-90-5	30.3	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved F J SQL MS-H	7440-38-2	9.02	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	20.1	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved F SQL-I	7440-47-3	7.57	5.4	15.0	20	ug/l	J	6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved J MS-H	7440-62-2	63.4	1.8	5.00	50	ug/l		6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 10:25

ESC Sample # : L801111-06

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	2860000	2820	5000	10000	ug/l		2540 C-	11/20/15	1
Aluminum F SQL-I	7429-90-5	74.6	20	500.	1000	ug/l	J	6020	11/20/15	10
Antimony	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/20/15	10
Arsenic F SQL-I	7440-38-2	8.91	2.5	5.00	20	ug/l	J	6020	11/20/15	10
Barium F SQL-I	7440-39-3	23.3	3.6	10.0	50	ug/l	J	6020	11/20/15	10
Beryllium	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/20/15	10
Cadmium	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/20/15	10
Chromium	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/20/15	10
Copper	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/20/15	10
Cobalt	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/20/15	10
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/20/15	10
Manganese	7439-96-5	U	2.5	5.00	50	ug/l		6020	11/20/15	10
Nickel	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/20/15	10
Selenium	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/20/15	10
Silver	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/20/15	10
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/20/15	10
Vanadium	7440-62-2	58.0	1.8	5.00	50	ug/l		6020	11/20/15	10
Zinc	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/20/15	10
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/18/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/18/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/18/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/18/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/18/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/18/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/18/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/18/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/18/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/18/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/18/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/18/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/18/15	1
Chloroform ~~F SQL-I~~ U FB-I	67-66-3	~~1.04~~ 2.50	~~0.324~~ 1.04	2.50	5	ug/l	J	8260B	11/18/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/18/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/18/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/18/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/18/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/18/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 10:25

ESC Sample # : L801111-06

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/18/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/18/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/18/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/18/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/18/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/18/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/18/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/18/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/18/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/18/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/18/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/18/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/18/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/18/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/18/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l	J4	8260B	11/18/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/18/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/18/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/18/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/18/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/18/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/18/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/18/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/18/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/18/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/18/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/18/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/18/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/18/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/18/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/18/15	1
Dibromofluoromethane	1868-53-7	105.				% Rec.		8260B	11/18/15	1
4-Bromofluorobenzene	460-00-4	93.6				% Rec.		8260B	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-06

Date Received : November 14, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU515-MW03-NT01

Project # : 60425210.23446543.00

Collected By : Katie Abbott
Collection Date : 11/13/15 10:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	U	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene	208-96-8	U	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene	56-55-3	U	0.0041	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene	86-73-7	U	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene	91-20-3	U	0.0198	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Phenanthrene F SQL-I	85-01-8	0.0144	0.0082	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene F SQL-I	90-12-0	0.0360	0.00821	0.0250	0.25	ug/l	J	8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	101.				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	112.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	114.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/20/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.338	5.00	10	ug/l		8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20~~/15	1
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-06

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW03-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 10:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate U MB-I	117-81-7	~~0.840~~ 1.00	~~0.785~~ 0.840	1.00	3	ug/l	J	8270C	11/20/15	1
Di-n-butyl phthalate F SQL-I	84-74-2	0.294	0.266	1.00	3	ug/l	J	8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/20/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.421~~ 1.00	~~0.278~~ 0.421	1.00	3	ug/l	J	8270C	11/20/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol U J LCS-L	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/20/15	1
2,4-Dinitrophenol U J ~~J~~ LCS-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol U J CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol U J LCS-L	100-02-7	U	2.01	5.00	10	ug/l	J4J3	8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline U J LCS-L	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol U J LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol U J LCS-L	88-06-2	U	0.297	5.00	10	ug/l	J3	8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	52.5				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	40.8				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	58.0				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	62.5				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	63.3				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	69.4				% Rec.		8270C	11/20/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:10

ESC Sample # : L801111-07

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	3000000	2820	5000	10000	ug/l		2540 C-	11/20/15	1
Aluminum F SQL-I	7429-90-5	52.0	20	500.	1000	ug/l	J	6020	11/20/15	10
Antimony	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/20/15	10
Arsenic F SQL-I	7440-38-2	7.80	2.5	5.00	20	ug/l	J	6020	11/20/15	10
Barium F SQL-I	7440-39-3	23.3	3.6	10.0	50	ug/l	J	6020	11/20/15	10
Beryllium	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/20/15	10
Cadmium	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/20/15	10
Chromium	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/20/15	10
Copper	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/20/15	10
Cobalt	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/20/15	10
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/20/15	10
Manganese	7439-96-5	133.	2.5	5.00	50	ug/l		6020	11/20/15	10
Nickel	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/20/15	10
Selenium	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/20/15	10
Silver	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/20/15	10
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/20/15	10
Vanadium F SQL-I	7440-62-2	23.0	1.8	5.00	50	ug/l	J	6020	11/20/15	10
Zinc	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/20/15	10
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/18/15	1
Benzene	71-43-2	U	0.331	0.500	1	ug/l		8260B	11/18/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/18/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/18/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/18/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/18/15	1
n-Butylbenzene	104-51-8	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
sec-Butylbenzene	135-98-8	U	0.365	0.500	1	ug/l		8260B	11/18/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/18/15	1
Carbon Disulfide	75-15-0	U	0.275	0.500	1	ug/l		8260B	11/18/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/18/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/18/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/18/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/18/15	1
Chloroform	67-66-3	U	0.324	2.50	5	ug/l		8260B	11/18/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/18/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/18/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/18/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/18/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/18/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/18/15	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:10

ESC Sample # : L801111-07

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/18/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/18/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/18/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/18/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/18/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/18/15	1
Ethylbenzene	100-41-4	U	0.384	0.500	1	ug/l		8260B	11/18/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/18/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/18/15	1
Isopropylbenzene	98-82-8	U	0.326	0.500	1	ug/l		8260B	11/18/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.500	1	ug/l		8260B	11/18/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/18/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/18/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/18/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/18/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l	J4	8260B	11/18/15	1
Naphthalene ONR	~~91-20-3~~	~~U~~	~~1~~	~~2.50~~	~~5~~	~~ug/l~~		~~8260B~~	~~11/18/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/18/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/18/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/18/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/18/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/18/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/18/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/18/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/18/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/18/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.373	0.500	1	ug/l		8260B	11/18/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/18/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/18/15	1
m&p-Xylene	1330-20-7	U	0.719	1.00	2	ug/l		8260B	11/18/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/18/15	1
Dibromofluoromethane	1868-53-7	104.				% Rec.		8260B	11/18/15	1
4-Bromofluorobenzene	460-00-4	95.8				% Rec.		8260B	11/18/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-07

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons										
Anthracene FJ SQL, LCS-H	120-12-7	0.0276	0.014	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Acenaphthene F SQL-I	83-32-9	0.0333	0.01	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Acenaphthylene FJ SQL, LCS-H	208-96-8	0.0140	0.012	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(a)anthracene	56-55-3	U	0.0041	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene	206-44-0	U	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene J LCS-H	86-73-7	0.134	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene FJ SQL, LCS-H	91-20-3	0.0290	0.0198	0.0250	0.25	ug/l	J	8270C-S	11/18/15	1
Phenanthrene	85-01-8	U	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	U	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene F SQL-I	90-12-0	0.0241	0.00821	0.0250	0.25	ug/l	J	8270C-S	11/18/15	1
2-Methylnaphthalene	91-57-6	U	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	97.2				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	107.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	109.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	U	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/20/15~~	~~1~~
Dibenzofuran F SQL-I	132-64-9	0.345	0.338	5.00	10	ug/l	J	8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodiphenylamine	86-30-6	U	0.304	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1

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DNR = do not report

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW04-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:10

ESC Sample # : L801111-07

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate U MB-I	117-81-7	~~0.738~~ 1.00	~~0.709~~ 0.738	1.00	3	ug/l	J	8270C	11/20/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate	131-11-3	U	0.283	1.00	3	ug/l		8270C	11/20/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.518~~ 1.00	~~0.278~~ 0.518	1.00	3	ug/l	J	8270C	11/20/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol UJ LCS-L	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/20/15	1
2,4-Dinitrophenol UJ DAR LCS-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol UJ CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol UJ LCS-L	100-02-7	U	2.01	5.00	10	ug/l	J4J3	8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline UJ LCS-L	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol UJ LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol UJ LCS-L	88-06-2	U	0.297	5.00	10	ug/l	J3	8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	36.9				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	32.8				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	49.1				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	63.4				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	83.8				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	74.9				% Rec.		8270C	11/20/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-08

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-MW04-ND01

Collected By : Katie Abbott
Collection Date : 11/13/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F JQL-I	7429-90-5	30.9	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SOL,MS-H	7440-38-2	8.30	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F JQL-I	7440-39-3	24.1	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	139.	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved FJ SOL,MS-H	7440-62-2	25.8	1.8	5.00	50	ug/l	J	6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-09

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-TMW04-ND01

Collected By : Katie Abbott
Collection Date : 11/13/15 12:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Aluminum,Dissolved F SQL-I	7429-90-5	99.6	20	500.	1000	ug/l	J	6020	11/18/15	10
Antimony,Dissolved	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/18/15	10
Arsenic,Dissolved FJ SQL, MS-4	7440-38-2	3.34	2.5	5.00	20	ug/l	J	6020	11/18/15	10
Barium,Dissolved F SQL-I	7440-39-3	27.7	3.6	10.0	50	ug/l	J	6020	11/18/15	10
Beryllium,Dissolved	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/18/15	10
Cadmium,Dissolved	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/18/15	10
Chromium,Dissolved	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/18/15	10
Copper,Dissolved	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/18/15	10
Cobalt,Dissolved	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/18/15	10
Lead,Dissolved	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/18/15	10
Manganese,Dissolved	7439-96-5	124.	2.5	5.00	50	ug/l		6020	11/18/15	10
Nickel,Dissolved	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/18/15	10
Selenium,Dissolved	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/18/15	10
Silver,Dissolved	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/18/15	10
Thallium,Dissolved	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/18/15	10
Vanadium,Dissolved	7440-62-2	U	1.8	5.00	50	ug/l		6020	11/18/15	10
Zinc,Dissolved	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/18/15	10

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-TMW04-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 12:55

ESC Sample # : L801111-10

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	2730000	2820	5000	10000	ug/l		2540 C-	11/20/15	1
Aluminum F SQL-I	7429-90-5	267.	20	500.	1000	ug/l	J	6020	11/20/15	10
Antimony	7440-36-0	U	2.1	5.00	20	ug/l		6020	11/20/15	10
Arsenic	7440-38-2	U	2.5	5.00	20	ug/l		6020	11/20/15	10
Barium F SQL-I	7440-39-3	29.3	3.6	10.0	50	ug/l	J	6020	11/20/15	10
Beryllium	7440-41-7	U	1.2	5.00	20	ug/l		6020	11/20/15	10
Cadmium	7440-43-9	U	1.6	5.00	10	ug/l		6020	11/20/15	10
Chromium	7440-47-3	U	5.4	15.0	20	ug/l		6020	11/20/15	10
Copper	7440-50-8	U	5.2	15.0	50	ug/l		6020	11/20/15	10
Cobalt	7440-48-4	U	2.6	5.00	20	ug/l		6020	11/20/15	10
Lead	7439-92-1	U	2.4	5.00	20	ug/l		6020	11/20/15	10
Manganese	7439-96-5	103.	2.5	5.00	50	ug/l		6020	11/20/15	10
Nickel	7440-02-0	U	3.5	10.0	20	ug/l		6020	11/20/15	10
Selenium	7782-49-2	U	3.8	10.0	20	ug/l		6020	11/20/15	10
Silver	7440-22-4	U	3.1	5.00	20	ug/l		6020	11/20/15	10
Thallium	7440-28-0	U	1.9	5.00	20	ug/l		6020	11/20/15	10
Vanadium	7440-62-2	U	1.8	5.00	50	ug/l		6020	11/20/15	10
Zinc	7440-66-6	U	25.6	50.0	250	ug/l		6020	11/20/15	10
Volatile Organics										
Acetone	67-64-1	U	10	25.0	50	ug/l		8260B	11/18/15	1
Benzene F SQL-I	71-43-2	0.490	0.331	0.500	1	ug/l	J	8260B	11/18/15	1
Bromobenzene	108-86-1	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
Bromochloromethane	74-97-5	U	0.52	0.750	1	ug/l		8260B	11/18/15	1
Bromodichloromethane	75-27-4	U	0.38	0.500	1	ug/l		8260B	11/18/15	1
Bromoform	75-25-2	U	0.469	0.500	1	ug/l		8260B	11/18/15	1
Bromomethane	74-83-9	U	0.866	2.50	5	ug/l		8260B	11/18/15	1
n-Butylbenzene J CCAL-H	104-51-8	5.42	0.361	0.500	1	ug/l		8260B	11/18/15	1
sec-Butylbenzene	135-98-8	9.07	0.365	0.500	1	ug/l		8260B	11/18/15	1
tert-Butylbenzene	98-06-6	U	0.399	0.500	1	ug/l		8260B	11/18/15	1
Carbon Disulfide F SQL-I	75-15-0	0.319	0.275	0.500	1	ug/l	J	8260B	11/18/15	1
Carbon tetrachloride	56-23-5	U	0.379	0.500	1	ug/l		8260B	11/18/15	1
Chlorobenzene	108-90-7	U	0.348	0.500	1	ug/l		8260B	11/18/15	1
Chlorodibromomethane	124-48-1	U	0.327	0.500	1	ug/l		8260B	11/18/15	1
Chloroethane	75-00-3	U	0.453	2.50	5	ug/l		8260B	11/18/15	1
Chloroform ~~F SQL-I~~ U FB-I	67-66-3	~~0.703~~ 2.50	~~0.324~~ 0.703	2.50	5	ug/l	J	8260B	11/18/15	1
Chloromethane	74-87-3	U	0.276	0.500	2.5	ug/l		8260B	11/18/15	1
2-Chlorotoluene	95-49-8	U	0.375	0.500	1	ug/l		8260B	11/18/15	1
4-Chlorotoluene	106-43-4	U	0.351	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.33	2.50	5	ug/l		8260B	11/18/15	1
1,2-Dibromoethane	106-93-4	U	0.381	0.500	1	ug/l		8260B	11/18/15	1
Dibromomethane	74-95-3	U	0.346	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichlorobenzene	95-50-1	U	0.349	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.500	1	ug/l		8260B	11/18/15	1
1,4-Dichlorobenzene	106-46-7	U	0.274	0.500	1	ug/l		8260B	11/18/15	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-TMW04-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 12:55

ESC Sample # : L801111-10

Site ID :

Project # : 60425210.23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dichlorodifluoromethane	75-71-8	U	0.551	2.50	5	ug/l		8260B	11/18/15	1
1,1-Dichloroethane	75-34-3	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloroethane	107-06-2	U	0.361	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloroethene	75-35-4	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.500	1	ug/l		8260B	11/18/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.396	0.500	1	ug/l		8260B	11/18/15	1
1,2-Dichloropropane	78-87-5	U	0.306	0.500	1	ug/l		8260B	11/18/15	1
1,1-Dichloropropene	563-58-6	U	0.352	0.500	1	ug/l		8260B	11/18/15	1
1,3-Dichloropropane	142-28-9	U	0.366	0.500	1	ug/l		8260B	11/18/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.418	0.500	1	ug/l		8260B	11/18/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.419	0.500	1	ug/l		8260B	11/18/15	1
2,2-Dichloropropane	594-20-7	U	0.321	0.500	1	ug/l		8260B	11/18/15	1
Ethylbenzene	100-41-4	50.9	0.384	0.500	1	ug/l		8260B	11/18/15	1
2-Hexanone	591-78-6	U	3.82	5.00	10	ug/l		8260B	11/18/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.256	0.500	1	ug/l		8260B	11/18/15	1
Isopropylbenzene	98-82-8	15.6	0.326	0.500	1	ug/l		8260B	11/18/15	1
p-Isopropyltoluene F SQL-I	99-87-6	0.610	0.35	0.500	1	ug/l	J	8260B	11/18/15	1
2-Butanone (MEK)	78-93-3	U	3.93	5.00	10	ug/l		8260B	11/18/15	1
Methylene Chloride	75-09-2	U	1	2.50	5	ug/l		8260B	11/18/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.14	5.00	10	ug/l		8260B	11/18/15	1
Methyl tert-butyl ether	1634-04-4	U	0.367	0.500	1	ug/l		8260B	11/18/15	1
Methyl Cyclohexane	108-87-2	U	0.38	0.500	1	ug/l	J4	8260B	11/18/15	1
Naphthalene	91-20-3	11.6	1	2.50	5	ug/l		8260B	11/18/15	1
n-Propylbenzene	103-65-1	17.9	0.349	0.500	1	ug/l		8260B	11/18/15	1
Styrene	100-42-5	U	0.307	0.500	1	ug/l		8260B	11/18/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.385	0.500	1	ug/l		8260B	11/18/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.750	1	ug/l		8260B	11/18/15	1
Tetrachloroethene	127-18-4	U	0.372	0.500	1	ug/l		8260B	11/18/15	1
Toluene	108-88-3	U	0.78	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.500	1	ug/l		8260B	11/18/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.355	0.500	1	ug/l		8260B	11/18/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.500	1	ug/l		8260B	11/18/15	1
1,1,2-Trichloroethane	79-00-5	U	0.383	0.500	1	ug/l		8260B	11/18/15	1
Trichloroethene	79-01-6	U	0.398	0.500	1	ug/l		8260B	11/18/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.50	5	ug/l		8260B	11/18/15	1
1,2,3-Trichloropropane	96-18-4	U	0.807	1.00	2.5	ug/l		8260B	11/18/15	1
1,2,4-Trimethylbenzene	95-63-6	3.12	0.373	0.500	1	ug/l		8260B	11/18/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.387	0.500	1	ug/l		8260B	11/18/15	1
o-Xylene	95-47-6	U	0.341	0.500	1	ug/l		8260B	11/18/15	1
m&p-Xylene F SQL-I	1330-20-7	1.10	0.719	1.00	2	ug/l	J	8260B	11/18/15	1
Vinyl chloride	75-01-4	U	0.259	0.500	1	ug/l		8260B	11/18/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	11/18/15	1
Dibromofluoromethane	1868-53-7	101.				% Rec.		8260B	11/18/15	1
4-Bromofluorobenzene	460-00-4	101.				% Rec.		8260B	11/18/15	1

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Est. 1970

REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-10

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-TMW04-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 12:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons										
Anthracene J LCS-H	120-12-7	0.985	0.014	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthene	83-32-9	7.52	0.01	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Acenaphthylene J MS>AL LCS-H	208-96-8	1.88	0.012	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(a)anthracene U MB-I	56-55-3	~~0.00748~~ 0.0250	~~0.0041~~ 0.00748	0.0250	0.05	ug/l	J	8270C-S	11/18/15	1
Benzo(a)pyrene	50-32-8	U	0.0116	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(b)fluoranthene	205-99-2	U	0.00212	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.00227	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Benzo(k)fluoranthene	207-08-9	U	0.0136	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Chrysene	218-01-9	U	0.0108	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.00396	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluoranthene J LCS-H	206-44-0	0.172	0.0157	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Fluorene J LCS-H	86-73-7	11.5	0.0085	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	0.0148	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Naphthalene ~~J LCS-H~~ DNR	~~91-20-3~~	~~11.4~~	~~0.0198~~	~~0.0250~~	~~0.25~~	~~ug/l~~		~~8270C-S~~	~~11/18/15~~	~~1~~
Phenanthrene	85-01-8	16.1	0.0082	0.0250	0.05	ug/l		8270C-S	11/18/15	1
Pyrene	129-00-0	0.757	0.0117	0.0250	0.05	ug/l		8270C-S	11/18/15	1
1-Methylnaphthalene	90-12-0	191.	0.0821	0.250	2.5	ug/l		8270C-S	11/19/15	10
2-Methylnaphthalene J LCS-H	91-57-6	0.854	0.00902	0.0250	0.25	ug/l		8270C-S	11/18/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	109.				% Rec.		8270C-S	11/18/15	1
2-Fluorobiphenyl	321-60-8	106.				% Rec.		8270C-S	11/18/15	1
p-Terphenyl-d14	1718-51-0	108.				% Rec.		8270C-S	11/18/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.329	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.62	5.00	10	ug/l		8270C	11/20/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.445	5.00	10	ug/l		8270C	11/20/15	1
Benzyl Alcohol	100-51-6	U	0.393	5.00	10	ug/l		8270C	11/20/15	1
Carbazole	86-74-8	13.9	0.26	5.00	10	ug/l		8270C	11/20/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~0.44~~	~~5.00~~	~~10~~	~~ug/l~~	~~J3~~	~~8270C~~	~~11/20/15~~	~~1~~
Dibenzofuran F SQL-I	132-64-9	8.62	0.338	5.00	10	ug/l	J	8270C	11/20/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.335	5.00	10	ug/l		8270C	11/20/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.500	1	ug/l		8270C	11/20/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.303	5.00	10	ug/l		8270C	11/20/15	1
3,3-Dichlorobenzidine	91-94-1	U	2.02	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dinitrotoluene	121-14-2	U	1.65	5.00	10	ug/l		8270C	11/20/15	1
2,6-Dinitrotoluene	606-20-2	U	0.279	5.00	10	ug/l		8270C	11/20/15	1
Hexachlorobenzene	118-74-1	U	0.341	0.500	1	ug/l		8270C	11/20/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.329~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.365	5.00	10	ug/l		8270C	11/20/15	1
Isophorone	78-59-1	U	0.272	5.00	10	ug/l		8270C	11/20/15	1
Nitrobenzene	98-95-3	U	0.367	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodimethylamine	62-75-9	U	1.26	5.00	10	ug/l		8270C	11/20/15	1
n-Nitrosodiphenylamine F SQL-I	86-30-6	5.18	0.304	5.00	10	ug/l	J	8270C	11/20/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.403	5.00	10	ug/l		8270C	11/20/15	1

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REPORT OF ANALYSIS

Dale Flores and Arielle Bisoglio
URS
8181 E. Tufts Avenue
Denver, CO 80237

February 04, 2016

ESC Sample # : L801111-10

Site ID :

Project # : 60425210.23446543.00

Date Received : November 14, 2015
Description : Holloman AFB

Sample ID : TU515-TMW04-NT01

Collected By : Katie Abbott
Collection Date : 11/13/15 12:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzylbutyl phthalate	85-68-7	U	0.275	1.00	3	ug/l		8270C	11/20/15	1
Bis(2-ethylhexyl)phthalate U MB-I	117-81-7	1.13	~~0.709~~ 1.13	~~1.00~~ 1.13	3	ug/l	J	8270C	11/20/15	1
Di-n-butyl phthalate	84-74-2	U	0.266	1.00	3	ug/l		8270C	11/20/15	1
Diethyl phthalate	84-66-2	U	0.282	1.00	3	ug/l		8270C	11/20/15	1
Dimethyl phthalate ~~J~~ F SALL-I	131-11-3	0.376	0.283	1.00	3	ug/l	J	8270C	11/20/15	1
Di-n-octyl phthalate U MB-I	117-84-0	~~0.590~~ 1.00	~~0.278~~ 0.590	1.00	3	ug/l	J	8270C	11/20/15	1
1,2,4-Trichlorobenzene ONR	~~120-82-1~~	~~U~~	~~0.355~~	~~5.00~~	~~10~~	~~ug/l~~		~~8270C~~	~~11/20/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	0.263	5.00	10	ug/l		8270C	11/20/15	1
2-Chlorophenol	95-57-8	U	0.283	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dichlorophenol	120-83-2	U	0.284	5.00	10	ug/l		8270C	11/20/15	1
2,4-Dimethylphenol	105-67-9	U	0.624	5.00	10	ug/l		8270C	11/20/15	1
4,6-Dinitro-2-methylphenol U J LCS-L	534-52-1	U	2.62	5.00	10	ug/l	J3	8270C	11/20/15	1
2,4-Dinitrophenol U J ~~D~~ I LCS-I	51-28-5	U	3.25	5.00	10	ug/l	J4J3	8270C	11/20/15	1
2-Methylphenol	95-48-7	U	0.312	5.00	10	ug/l		8270C	11/20/15	1
3&4-Methyl Phenol U J CCAL-L	3&4-Methyl	U	0.266	5.00	10	ug/l		8270C	11/20/15	1
2-Nitrophenol	88-75-5	U	0.32	5.00	10	ug/l		8270C	11/20/15	1
4-Nitrophenol U J LCS-L	100-02-7	U	2.01	5.00	10	ug/l	J4J3	8270C	11/20/15	1
4-Chloroaniline	106-47-8	U	0.382	5.00	10	ug/l		8270C	11/20/15	1
2-Nitroaniline	88-74-4	U	1.9	5.00	10	ug/l		8270C	11/20/15	1
3-Nitroaniline	99-09-2	U	0.308	5.00	10	ug/l		8270C	11/20/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.318	5.00	10	ug/l		8270C	11/20/15	1
4-Nitroaniline U J LCS-L	100-01-6	U	0.349	5.00	10	ug/l		8270C	11/20/15	1
Pentachlorophenol U J LCS-L	87-86-5	U	0.313	5.00	10	ug/l	J3	8270C	11/20/15	1
Phenol	108-95-2	U	0.334	5.00	10	ug/l		8270C	11/20/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.236	5.00	10	ug/l		8270C	11/20/15	1
2,4,6-Trichlorophenol U J LCS-L	88-06-2	U	0.297	5.00	10	ug/l	J3	8270C	11/20/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	39.2				% Rec.		8270C	11/20/15	1
Phenol-d5	4165-62-2	36.4				% Rec.		8270C	11/20/15	1
Nitrobenzene-d5	4165-60-0	54.5				% Rec.		8270C	11/20/15	1
2-Fluorobiphenyl	321-60-8	69.1				% Rec.		8270C	11/20/15	1
2,4,6-Tribromophenol	118-79-6	65.6				% Rec.		8270C	11/20/15	1
p-Terphenyl-d14	1718-51-0	87.1				% Rec.		8270C	11/20/15	1

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