F I N A L

FINAL DATA VALIDATION REPORT

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Prepared for

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List of Acronyms and Abbreviations

µg/Kg	Milligrams per Kilogram
µg/L	Milligrams per Liter
>	Greater Than
<	Less Than
≤	Less Than or Equal To
#	Number
%	Percent
CLP	Contract Laboratory Program
DOC	Dissolved Organic Carbon
DOD	Department of Defense
DL	Detection Limit
DQO	Data Quality Objective
DRO	Diesel Range Organics
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
FD	Field Duplicate
GRO	Gasoline Range Organics
I	Bias in sample result is indeterminate
ICS	Interference Check Samples
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LD	Laboratory Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MCL	Maximum Contaminate Level
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
ND	Non-detect
NFG	National Functional Guidelines
NMED	New Mexico Environmental Department

List of Acronyms and Abbreviations

ORO	Oil Range Organics
PAHs	Polynuclear Aromatic Hydrocarbons
PARCCS	Precision, Accuracy, Representativeness, Analytical Completeness and Comparability, Sensitivity
QAPP	Quality Assurance Project Plan
QC	Quality Control
RPD	Relative Percent Difference
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.
SW	Test Methods for Evaluating Solid Waste
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
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 April-June 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 twenty-two 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
SW8260B	VOCs
SW8270C	SVOCs
SW8270C SIM	PAHs
SW8015D	GRO/DRO/ORO
SW6010B/6020/7470A/7471A	Total/Dissolved Metals
SM2540C	TDS
SW9045D	pH

DRO – Diesel Range Organics
EPA – U.S. Environmental Protection Agency
Physical/Chemical Methods (SW-846)
GRO – Gasoline Range Organics
ORO – Oil Range Organics
PAHs – Polynuclear Aromatic Hydrocarbons
SM – Standard Methods
SVOCs – Semi Volatile Compounds
SW – Test Methods for Evaluating Solid Waste
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 six 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 4% of the April-June 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 L762679– volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polyaromatic hydrocarbons (PAHs), gasoline range organics (GRO), diesel range organics (DRO), oil range organics (ORO), total metals, and pH.

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).
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. With the exception of those discussed in Section 4, no data were rejected from the April-June 2015 sampling event.

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. With the exception of those discussed in Section 4, 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.

With the exceptions noted in Table 4.3b, the comparison between parent sample and FD results met the above criteria. Overall, >99% of the FD results met the above-listed precision criteria.

3.1.2 Matrix-Dependent Quality Control

3.1.1.2 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. In instances of less than 35% of MS/MSD RPD were outside of acceptance criteria, 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.

3.1.1.3 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, ten laboratory duplicates were 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.

3.1.2 Method-Specific Quality Control Measures

3.1.2.1 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 where less than 35%, only the parent result was considered for qualification. Overall, greater than > 95% 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 were performed as described in Section 3.1.3.1. Overall, greater than 99% 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, greater than 99% of the surrogate recoveries were within the acceptance limits indicating acceptable accuracy, method performance, and extraction efficiency was attained. See individual narratives for any data qualification applied as a result of surrogate recoveries.

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 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, 59 results were qualified as unusable (rejected) out of 4,112 total results for the project (i.e., <2%). As such, the overall analytical completeness for this program is greater than 98%. 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).

3.6.1 Metals

No metals analyzes were reported as ND at levels that exceeded the screening limits.

3.6.2 General Chemistry Parameters

No general chemistry parameters were reported as non-detect at levels that exceeded the screening limits.

3.6.3 Organic Parameters

Groundwater

There were 969 results out of 1,058 organic results where results for a given analyte were reported as ND or qualified as ND due to blank contamination. Of these 969 results, 1,2-dibromo-3-chloropropane results for one sample and the 1,2-dibromoethane results for one sample, were reported as non-detect at elevated LODs, and exceeded the USEPA MCL of 0.2 µg/L for 1,2-dibromo-3-chloropropane and 0.05 µg/L for 1,2-dibromoethane. These non-detect results will be evaluated during the risk assessment. All other results reported as ND met the screening limits.

Soils

No soil organic analyzes were reported as ND at levels that exceeded the screening limits.

QC samples collected and analyzed during the sampling event included samples selected for MS/MSD analysis, laboratory duplicate samples, field duplicate samples, and equipment 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 Final QAPP-required frequency of one set per twenty site samples per matrix.

Table 4.1a: April-June 2015 MS/MSD Samples

Sample Identification	Data Package	Analyses
Soils		
TU503-EX01-F02-12-N	L763938	SVOCs
TU503-EX01-F01-12-N	L764216	VOCs, TPH
TU503-EX01-F01-12-N	L763938	Total Metals (6010B/7471A), DRO, PAHs
TU518-EX02-W01-10-N	L762679	Total Metals (6010B), PAHs
Waters		
H-SS059-MW51-NT01	L767115	SVOCs, VOCs, Total Metals (7470A,6020, 6010B) , PAHs
H-SS059-MW51-ND01	L767115	Dissolved Metals (7470A, 6020, 6010B)

DRO – Diesel Range Organics PAHs – Polyaromatic Hydrocarbons SVOCs – Semivolatile Organics
TPH – Total Petroleum Hydrocarbon VOCs – Volatile Organic Compounds
*MS/MSD performed on field QC sample; therefore, not representative of the site-specific matrix. Results from MS/MSD were not used to calculate overall qualifiers.

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 table below presents the analytes where >35% of the MS and MSD percent recoveries were outside limits and data qualification has been applied to associated samples. There were no overall qualifiers applied on the basis of RPD recoveries outside control limits. 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: April - June 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
Soils					
Total Metals					
Antimony	2	0	4	50%	All results, with the exception of those in which the MS/MSD results were within control limits, were qualified as estimated (UJ/J MS-L) to reflect the potential low bias.
Manganese	2	0	4	50%	
Selenium	0	2	4	50%	All detected total selenium sample results, with the exception of those in which the MS/MSD results were within control limits, were qualified as estimated (J MS-H) to reflect the potential high bias.
SVOCs					
Benzoic Acid	2	0	2	100%	As the potential bias was considered to be low, and the MS/MSD recovered <10%, the associated Benzoic Acid result for sample TU503-EX01-F02-13-N was qualified as unusable (R).
Waters					
Metals					
Mercury	1	0	2	50%	All results, with the exception of those in which the MS/MSD results were within control limits, were qualified as estimated (UJ/J MS-L) to reflect the potential low bias.
Chromium	1	0	2	50%	
Copper	1	0	2	50%	
Nickel	2	0	2	100%	
Zinc	2	0	2	100%	
Aluminum	1	0	2	50%	
SVOCs					
2,4-Dichlorophenol	2	0	2	100%	All results, with the exception of those in which the MS/MSD results were within control limits, were qualified as estimated (UJ/J MS-L) to reflect the potential low bias.
2,4-Dimethylphenol	2	0	2	100%	
4-Chloro-3-Methylphenol	2	0	2	100%	
2-Methylophenol (O-Cresol)	2	0	2	100%	As the potential bias was considered to be low, and the MS/MSD recovered <10%, the associated analyte results for sample H-SS059-MW51-NT01 was qualified as unusable (R).
3&4-Methyl Phenol	2	0	2	100%	
VOCs					
Styrene	2	0	2	100%	As the potential bias was considered to be low, and the %Rs were <10%, the associated non-detect results were qualified as unusable (R).

Analyte	# of MS/MSD Below Control Limits	# of MS/MSD Above Control Limits	Total # of MS/MSD	% MS/MSD Outside of Control Limits	Qualification
PAHs					
Benzo(a)anthracene	2	0	2	100%	All results, with the exception of those in which the MS/MSD results were within control limits, were qualified as estimated (UJ/J MS-L) to reflect the potential low bias.
Benzo(a)pyrene	2	0	2	100%	
Benzo(b)fluoranthene	2	0	2	100%	
Benzo(g,h,i)perylene	2	0	2	100%	
Benzo(k)fluoranthene	2	0	2	100%	
Chrysene	2	0	2	100%	
Dibenz(a,h)anthracene	2	0	2	100%	
Indeno(1,2,3-c,d)pyrene	2	0	2	100%	

– Number
% – Percentage
< – Less Than
H – High Bias
L – Low Bias
MS – Matrix Spike
MSD – Matrix Spike Duplicate
PAHs – Polyaromatic Hydrocarbons
R – Unusable
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: April-June 2015 Laboratory Duplicate Samples

Sample Identification	Data Package	Analyses
Soils		
TU-503-EX01-W07-09-N	L763938	pH
TU-503-EX01-F01-12-N	L763938	Total 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 field 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 Final QAPP-required frequency of one set per twenty site samples per matrix.

Table 4.3a: April-June 2015 Field Duplicate Samples

Field Duplicate Pair	Data Package	Analyses
Soils		
TU518-EX02-W05-10-N/ TU518-EX02-W05-10-D	L762679	VOCs, GRO, SVOCs, PAHs, DRO/ORO, Total Metals, pH
Waters		
H-SS059-MW52-NT01/ H-SS059-MW52-DT01	L767115	VOCs, PAHs, SVOCs, Total Metals, TDS
H-SS059-MW52-DD01/ H-SS059-MW52-ND01	L767115	Dissolved Metals

DRO – Diesel Range Organics GRO – Gasoline Range Organics ORO – Oil Range Organics
PAHs – Polyaromatic Hydrocarbons SVOCS – Semi Volatile Compounds TDS – Total Dissolved Solids
VOCs – Volatile Organic Compounds

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.

The table below presents the analytes where >35% of the field duplicate results did not meet the concentration-dependent criteria and qualifications have been applied to associated samples.

Table 4.3b: April-June 2015 Field Duplicate Overall Qualifiers

Analyte	# of FDs Outside Control Limits	Total # of FDs	% FD Outside of Control Limits	Qualification
Soils				
DRO/GRO				
DRO	1	1	100%	All associated results, with the exception of those field duplicate results that were within control limits, were qualified as estimated (UJ/J FD-I) to reflect the potential precision issue.

– Number % – Percentage FD – Field Duplicate
I – Indeterminate Bias UJ/J – Estimated

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

4.4 FIELD BLANKS

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

Table 4.4a: April-June 2015 Field Blank Samples

Equipment Blank Identification	Data Package	Analyses
TU518-FIELDBLANK01-B	L762679	VOCs, GRO
H-SS059-FIELDBLANK-FT01	L767115	VOCs

GRO – Gasoline Range Organics VOCs – Volatile Organic Compounds

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: April-June 2015 Field Blank Overall Qualifiers

Analyte	# of FBs with Detection	Total # of FBs	% FBs with Detection	Qualification
Ethylbenzene	1	2	50%	Results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U FB-I).
p-Isopropyltoluene	1	2	50%	
n-Propylbenzene	1	2	50%	

< – Less Than
FB – Field Blank
– Number
I – Indeterminate Bias
% – Percent
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: L762679
Sampling Event Dates: April 29-30, 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: August 17, 2015
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						
				GRO	VOCs	PAHs	DRO/ORO	SVOCs	Total Metals	pH
L762679										
TU518-EX02-W01-10-N	SA	L762679-01	Soil	X	X	X^m	X	X	X^m	X
TU518-EX02-W02-10-N	SA	L762679-02	Soil	X	X	X	X	X	X	X
TU518-EX02-F01-12.5-N	SA	L762679-03	Soil	X	X	X	X	X	X	X
TU518-EX02-F02-13-N	SA	L762679-04	Soil	X	X	X	X	X	X	X
TU518-EX02-W03-10-N	SA	L762679-05	Soil	X	X	X	X	X	X	X
TU518-EX02-W04-10-N	SA	L762679-06	Soil	X	X	X	X	X	X	X
TU518-EX02-W05-10-N	SA	L762679-07	Soil	X	X	X	X	X	X	X
TU518-EX02-W05-10-D	FD	L762679-08	Soil	X	X	X	X	X	X	X
TU518-FIELDBLANK01-B	FB	L762679-09	Water	X	X	---	---	---	---	---
TU518-TRIPBLANK01-B	TB	L762679-10	Water	X	X	---	---	---	---	---

Sample Type: FB – Field Blank; FD – Field Duplicate; SA – Sample; TB – Trip Blank; X^m - Matrix Spike/Matrix Spike Duplicate

Analyses:

DRO/ORO - Diesel and Oil Range Organics (8015)
GRO – Gasoline Range Organics (8015D)
TDS – Total Dissolved Solids (SM2540C)
Total/ Metals – Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc, Mercury (6010B/7471A)
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	Yes	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.
Reporting	Yes	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, and no results were changed. 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 are not reported by Method 8270C SVOCs but are reported by Method 8260B volatile organic compounds (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. A revised report was issued by the laboratory to correct the SVOC analyte list.
Holding Times	Yes	All samples were analyzed within the method required holding time.

Review Parameter	Criteria Met?	Comment
Laboratory Blanks • Method Blank • Initial/Continuing Calibration Blank	No	With the exception listed in Table 1, target analytes were not detected within the method or calibration blanks.
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate TU518-EX02-W01-10-N (6010B Metals, PAHs) • Laboratory Duplicate None in this package	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 exceptions listed in Table 2, the MS/MSD recoveries and relative percent differences (RPDs) met quality control criteria. The laboratory only spiked the diesel carbon range (C10-C28); therefore, accuracy and precision with respect to the sample matrix could not be assessed for oil range organics (ORO). 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. **Laboratory Duplicate** A method duplicate was not performed on a sample from this data package.
Metals Only • Serial Dilution TU518-EX02-W01-10-N (6010B Metals) • Post Digestion Spike TU518-EX02-W01-10-N (6010B 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, SVOCs, PAHs, GRO, DRO/ORO)	No	With the exception listed in Table 4, the surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank TU503-TRIPBLANK01-NT01 (GRO, VOCs) • Field Duplicate TU518-EX02-W05-10-N TU518-EX02-W05-10-D • Equipment Blank None in this package • Field Blank TU518-FIELDBLANK01-B	Yes	**Trip Blank** Target analytes were not detected in the trip blank. **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 >5x the LOQ acceptable sampling and analytical precision is indicated by an RPD

Review Parameter	Criteria Met?	Comment
		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 VOC and gasoline range organic (GRO) results for samples TU503-SB09-NS02 and TU503-SB10-NS02 were reported as non-detect at elevated LODs. See Section 3.7 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.

Review Parameter	Criteria Met?	Comment
		Method 8270C Polynuclear Aromatic Hydrocarbons (PAHs) The %RSD values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **Method 8015D GRO/Diesel Range Organics (DRO)/ORO** The relationship between instrument response and concentration was established with a blank and at least five standards for the entire carbon range of C10-C40. The %RSD over the initial calibrations curve satisfied the method requirement of <15%. Therefore, the initial calibration met method acceptance criteria. **Methods 6010B (Inductively Coupled Plasma [ICP] Metals)** 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 one standard. 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%. **Method 7471A (Mercury)** The ICALs were performed in association with the samples reported in this package. The relationship between instrument response and concentration was established with five standards. The correlation coefficient was >0.995. The calibration was verified with the analysis of an ICV standard. The analytes were recovered within the acceptance range of 90-110%. Response and linearity criteria were met and data qualification on the basis of initial calibration was not necessary.
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 (DFTTP Key Ions and Abundance Criteria), alternate tuning criteria may be used, (e.g., 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 PAHs/SVOCs** The %D values for all target analytes in the calibration were less than 20%.

Review Parameter	Criteria Met?	Comment
		Method 8015D GRO/DRO/ORO The %Ds for all target compounds in the ICVs and CCALs were less than 15%. Data qualification was not necessary. **Methods 6010B (ICP Metals) & 7471A (Mercury)** 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%.
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 A 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 element calcium was 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/SVOCs/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. **Method 8015 DRO/ORO** The laboratory only spiked the diesel carbon range (C10-C28); therefore, accuracy and precision with respect to the method could not be assessed for ORO.
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.

Review Parameter	Criteria Met?	Comment
		Methods 8015D (GRO/DRO/ORO), 6010B (ICP Metals), & 7470A (Mercury) The instrument printouts were reviewed. Results obtained for QC 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.
Transcription Errors	Yes	Transcription errors were not found in this data package. Data qualification was not necessary.
Recalculation	Yes	Calculation or sample quantitation errors were not found in this data package. Data qualification was not necessary.
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
CLP – Contract Laboratory Program
COC – Chain of Custody
DFTPP - Decafluorotriphenylphosphine
DLs – Detection Limits
DOD – Department of Defense
DRO – Diesel Range Organics
GRO – Gasoline Range Organics
ICAL – Initial Calibration
ICP – Inductively Coupled Plasma
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
ORO – Oil Range Organics
PAHs – Polynuclear Aromatic Hydrocarbons
PDS – Post Digestion Spike
QAPP – Quantity 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
VOCs – Volatile Organic Compounds

Table 1: Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
VOCs			
MB Batch WG787103 TU518-EX02-W01-10-N TU518-EX02-W02-10-N TU518-EX02-F01-12.5-N TU518-EX02-F02-13-N	Methylene Chloride	0.00157 mg/Kg	None. The associated results were reported as non-detect.
PAHs			
MB Batch WG787117 TU518-EX02-W01-10-N TU518-EX02-W02-10-N TU518-EX02-F01-12.5-N TU518-EX02-F02-13-N TU518-EX02-W03-10-N TU518-EX02-W04-10-N	Fluoranthene	0.000732 mg/Kg	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).

Associated Samples	Analyte	Concentration	Qualification
TU518-EX02-W05-10-N TU518-EX02-W05-10-D			

< - Less Than
mg/Kg – Milligrams per Kilogram
VOCs – Volatile Organic Compounds
I – Indeterminate Bias
PAHs – Polynuclear Aromatic Hydrocarbons
MB – Method Blank
U – Non-detect

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

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
Total Metals				
TU518-EX02-W01-10-N	Chromium	86/**79** (80-120)	8 (50)	As the potential bias was considered to be low, the associated results were qualified as estimated (J MS-L).
	Manganese	**77/76** (80-120)	1 (50)	
	Selenium	**136/121** (80-120)	11 (50)	As the potential bias was considered to be high, and the associated selenium result was reported as non-detect, data qualification was not considered necessary.
	Zinc	87/**79** (80-120)	9 (50)	As the potential bias was considered to be low, the associated zinc result was qualified as estimated (J MS-L).
PAHs				
TU518-EX02-W01-10-N	Benzo(b)fluoranthene	66.5/**61.6** (64.7-122)	7.52 (30)	As the potential bias was considered to be low, the associated benzo(b)fluoranthene result was qualified as estimated (J MS-L).

%R – Percent Recoveries
MS/MSD – Matrix Spike Matrix Spike Duplicate
RPD – Relative Percent Difference
J – Estimated
PAHs – Polynuclear Aromatic Hydrocarbons
L – Low Bias
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			
TU518-EX02-W01-10-N	Aluminum	**132** (75-125)	As the potential bias was considered to be high, the associated detected aluminum result was qualified as estimated (J PDS-H).

%R – Percent Recovery
PDS – Post Digestion Spike
H – High Bias
J – Estimated
Bold indicates a recovery or RPD outside of acceptance limit

Table 4: Surrogate Recovery Outliers and Resultant Data Qualification

Sample	Surrogate	%R (Limits)	Qualification
DRO/ORO			
TU518-EX02-F01-12.5-N	o-Terphenyl	**36.6** (50-150)	As the potential bias was considered to be low, the associated DRO and ORO results were qualified as estimated (UJ/J SUR-L).

%R - Percent Recovery
DRO – Diesel Range Organics
L – Low Bias
ORO – Oil Range Organics
SUR – Surrogate
UJ/J - Estimated
Bold indicates a recovery outside of acceptance limits.

Table 5: Field Duplicate Outliners and Resultant Data Qualification

Field Duplicate Pair	Analyte	Parent Result (mg/Kg)	FD Result (mg/Kg)	Criteria not Met	Qualification
DRO/ORO					
TU518-EX02-W05-10-N/ TU518-EX02-W05-10-D	DRO	18	44	Absolute Difference >2x LOQ	As the absolute difference between the field duplicate pair results was >2x the LOQ, the associated results were qualified as estimated (J FD-I).

> - Greater Than
DRO – Diesel Range Organics
FD – Field Duplicate
I – Indeterminate Bias
J – Estimated
LOQ – Limit of Quantitation
mg/Kg – Milligrams per Kilogram
ORO – Oil Range Organics

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

Associated Samples	Analyte	%D (Limit)	Data Qualification
VOCs			
TU518-EX02-W01-10-N TU518-EX02-W02-10-N TU518-EX02-F01-12.5-N TU518-EX02-F02-13-N	Carbon Disulfide	-22.3 (±20)	As the potential bias was considered to be low, the associated results were qualified as estimated (UJ/J CCAL-L).
TU518-EX02-W01-10-N TU518-EX02-W02-10-N TU518-EX02-F01-12.5-N TU518-EX02-F02-13-N TU518-FIELDBLANK01-B TU518-TRIPBLANK01-B	Bromomethane	-29 (±20)	
	Chloroethane	-23.2 (±20)	
	Acetone	-40.5 (±20)	
	Carbon Disulfide	-23.5 (±20)	
	Methylene Chloride	-23.6 (±20)	
	Methyl tert-butyl ether	-20.6 (±20)	
	2-Butanone (MEK)	-24.1 (±20)	
	1,2-Dichlorobenzene	-20.3 (±20)	
	1,2,4-Trichlorobenzene	-21.3 (±20)	
	Hexachloro-1,3-butadiene	-24.7 (±20)	

Associated Samples	Analyte	%D (Limit)	Data Qualification
	Naphthalene	-28.3 (±20)	
	1,2,3-Trichlorobenzene	-25 (±20)	

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

Table 7: ICS Outliers and Resultant Data Qualification

Interferent Element	Analyte	ICS A (µg/L)	DL (µg/L)	Qualified Samples	Qualification
Calcium	Antimony	-1.37	7.5	TU518-EX02-W01-10-N	As the potential bias was considered to be low, the associated results were qualified as estimated (UJ/J ICS-L).
	Arsenic	-1.98	6.5		
	Cadmium	-0.26	0.7		
	Lead	-1.52	1.9		
	Nickel	-21.30	4.9		
	Antimony	-1.37	7.5	TU518-EX02-W02-10-N TU518-EX02-W03-10-N TU518-EX02-W04-10-N TU518-EX02-W05-10-D	
	Arsenic	-1.98	6.5		
	Cadmium	-0.26	0.7		
	Chromium	0.21	1.4		As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
	Lead	-1.52	1.9		As the potential bias was considered to be low, the associated results were qualified as estimated (UJ/J ICS-L).
	Nickel	-21.30	4.9		
	Vanadium	0.74	2.4		As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
	Zinc	0.61	5.9		
	Antimony	-1.37	7.5	TU518-EX02-F01-12.5-N TU518-EX02-F02-13-N TU518-EX02-W05-10-N	As the potential bias was considered to be low, the associated results were qualified as estimated (UJ/J ICS-L).
	Arsenic	-1.98	6.5		
	Cadmium	-0.26	0.7		
	Chromium	0.21	1.4		As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
	Lead	-1.52	1.9		As the potential bias was considered to be low, the associated results were qualified as estimated (UJ/J ICS-L).
	Nickel	-21.30	4.9		
	Selenium	3.48	7.4		As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
	Vanadium	0.74	2.4		
	Zinc	0.61	5.9		

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

Table 8: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
VOCs				
LCS WG787781 TU518-EX02-W03-10-N TU518-EX02-W04-10-N TU518-EX02-W05-10-N TU518-EX02-W05-10-D	Acetone	**180/165** (20-160)	8.93 (50)	As the potential bias was considered to be high, the associated detected acetone results were qualified as estimated (J LCS-H).
WG786412 TU518-FIELDBLANK01-B TU518-TRIPBLANK01-B	1,1-Dichloroethene	102/**135** (70-130)	28 (50)	As the potential bias was considered to be high, and the associated samples were reported as non-detect, data qualification was not considered necessary.
PAHs				
WG787117 TU518-EX02-W01-10-N TU518-EX02-W02-10-N TU518-EX02-F01-12.5-N TU518-EX02-F02-13-N TU518-EX02-W03-10-N TU518-EX02-W04-10-N TU518-EX02-W05-10-N TU518-EX02-W05-10-D	Anthracene	**113/112** (55-105)	1.11 (30)	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J LCS-H).
	Benzo(a)anthracene	**111**/108 (70-130)	2.51 (30)	

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

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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-01

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W01-10-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 12:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.4	.01			su		9045D	05/07/15	1
Total Solids	TSOLIDS	74.7	.0333			%		2540 G-2	05/06/15	1
Mercury	7439-97-6	U	.0037	0.013	0.027	mg/kg		7471A	05/06/15	1
Aluminum J PDS-H	7429-90-5	1200	4.7	6.7	13.	mg/kg	VO1	6010B	05/11/15	1
Antimony UJ ICS-L	7440-36-0	U	1	1.3	2.7	mg/kg		6010B	05/11/15	1
Arsenic UJ ICS-L	7440-38-2	U	.87	1.3	2.7	mg/kg		6010B	05/11/15	1
Barium	7440-39-3	46.	.23	0.33	0.67	mg/kg		6010B	05/11/15	1
Beryllium	7440-41-7	U	.094	0.13	0.27	mg/kg		6010B	05/11/15	1
Cadmium UJ ICS-L	7440-43-9	U	.094	0.33	0.67	mg/kg		6010B	05/11/15	1
Chromium J MS-L	7440-47-3	1.6	.19	0.67	1.3	mg/kg		6010B	05/11/15	1
Cobalt F SQL-I	7440-48-4	0.68	.31	0.67	1.3	mg/kg	J	6010B	05/11/15	1
Copper F SQL-I	7440-50-8	1.5	.71	1.3	2.7	mg/kg	J	6010B	05/11/15	1
Lead J ICS-L	7439-92-1	2.4	.25	0.33	0.67	mg/kg		6010B	05/11/15	1
Manganese J MS-L	7439-96-5	48.	.16	0.67	1.3	mg/kg		6010B	05/11/15	1
Nickel UJ ICS-L	7440-02-0	U	.66	1.3	2.7	mg/kg		6010B	05/11/15	1
Selenium AF SQL-I	7782-49-2	U	.99	1.3	2.7	mg/kg	J5	6010B	05/11/15	1
Silver	7440-22-4	U	.37	0.67	1.3	mg/kg		6010B	05/11/15	1
Thallium	7440-28-0	U	.87	1.3	2.7	mg/kg		6010B	05/11/15	1
Vanadium	7440-62-2	4.4	.32	1.3	2.7	mg/kg		6010B	05/11/15	1
Zinc FJ SQL, MS-L	7440-66-6	4.6	.79	3.3	6.7	mg/kg	J	6010B	05/11/15	1
TPH (GC/FID) Low Fraction	8006-61-9	U	.58	1.3	2.7	mg/kg		8015D/GR	05/06/15	20
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	97.9				% Rec.		8015D/GR	05/06/15	1
Volatile Organics										
Acetone ~~UJ CCAL-L~~ UJ CCAL-L	67-64-1	U	.28	0.71	1.4	mg/kg		8260B	05/08/15	21.25
Benzene	71-43-2	U	.0076	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Bromobenzene	108-86-1	U	.008	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Bromochloromethane	74-97-5	U	.011	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Bromodichloromethane	75-27-4	U	.0072	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Bromoform	75-25-2	U	.012	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Bromomethane UJ CCAL-L	74-83-9	U	.037	0.071	0.14	mg/kg		8260B	05/08/15	21.25
n-Butylbenzene	104-51-8	U	.0074	0.014	0.028	mg/kg		8260B	05/08/15	21.25
sec-Butylbenzene F SQL-I	135-98-8	0.020	.0058	0.014	0.028	mg/kg	J	8260B	05/08/15	21.25
tert-Butylbenzene	98-06-6	U	.0059	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Carbon Disulfide FJ SQL, I CCAL-L	75-15-0	0.0086	.008	0.014	0.028	mg/kg	J	8260B	05/08/15	21.25
Carbon tetrachloride	56-23-5	U	.0094	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Chlorobenzene	108-90-7	U	.006	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Chlorodibromomethane	124-48-1	U	.01	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Chloroethane UJ CCAL-L	75-00-3	U	.027	0.071	0.14	mg/kg		8260B	05/08/15	21.25
Chloroform	67-66-3	U	.0066	0.071	0.14	mg/kg		8260B	05/08/15	21.25

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L762679-01 (PH) - 7.4 at 21.1C

KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W01-10-N

Collected By :
Collection Date : 04/29/15 12:15

ESC Sample # : L762679-01

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloromethane F SAL-I	74-87-3	0.021	.011	0.014	0.071	mg/kg	J	8260B	05/08/15	21.25
2-Chlorotoluene	95-49-8	U	.0086	0.014	0.028	mg/kg		8260B	05/08/15	21.25
4-Chlorotoluene	106-43-4	U	.0068	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,2-Dibromo-3-Chloropropane	96-12-8	U	.029	0.071	0.14	mg/kg		8260B	05/08/15	21.25
1,2-Dibromoethane	106-93-4	U	.0098	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Dibromomethane	74-95-3	U	.011	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,2-Dichlorobenzene UJ CCAL-L	95-50-1	U	.0087	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,3-Dichlorobenzene	541-73-1	U	.0068	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,4-Dichlorobenzene	106-46-7	U	.0064	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Dichlorodifluoromethane	75-71-8	U	.02	0.071	0.14	mg/kg		8260B	05/08/15	21.25
1,1-Dichloroethane	75-34-3	U	.0056	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,2-Dichloroethane	107-06-2	U	.0075	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,1-Dichloroethene	75-35-4	U	.0086	0.014	0.028	mg/kg		8260B	05/08/15	21.25
cis-1,2-Dichloroethene	156-59-2	U	.0067	0.014	0.028	mg/kg		8260B	05/08/15	21.25
trans-1,2-Dichloroethene	156-60-5	U	.0075	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,2-Dichloropropane	78-87-5	U	.01	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,1-Dichloropropene	563-58-6	U	.009	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,3-Dichloropropane	142-28-9	U	.0059	0.014	0.028	mg/kg		8260B	05/08/15	21.25
cis-1,3-Dichloropropene	10061-01-5	U	.0075	0.014	0.028	mg/kg		8260B	05/08/15	21.25
trans-1,3-Dichloropropene	10061-02-6	U	.0076	0.014	0.028	mg/kg		8260B	05/08/15	21.25
2,2-Dichloropropane	594-20-7	U	.0079	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Ethylbenzene	100-41-4	U	.0084	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Hexachloro-1,3-butadiene UJ CCAL-L	87-68-3	U	.0098	0.014	0.028	mg/kg		8260B	05/08/15	21.25
2-Hexanone	591-78-6	U	.11	0.14	0.28	mg/kg		8260B	05/08/15	21.25
Isopropylbenzene	98-82-8	U	.007	0.014	0.028	mg/kg		8260B	05/08/15	21.25
p-Isopropyltoluene	99-87-6	U	.0058	0.014	0.028	mg/kg		8260B	05/08/15	21.25
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	.13	0.14	0.28	mg/kg		8260B	05/08/15	21.25
Methylene Chloride UJ CCAL-L	75-09-2	U	.028	0.071	0.14	mg/kg		8260B	05/08/15	21.25
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.054	0.14	0.28	mg/kg		8260B	05/08/15	21.25
Methyl tert-butyl ether UJ CCAL-L	1634-04-4	U	.006	0.014	0.028	mg/kg		8260B	05/08/15	21.25
~~Naphthalene DNR~~	~~91-20-3~~	~~U~~	~~.028~~	~~0.071~~	~~0.14~~	~~mg/kg~~		~~8260B~~	~~05/08/15~~	~~21.25~~
n-Propylbenzene	103-65-1	U	.0059	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Styrene	100-42-5	U	.0067	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,1,1,2-Tetrachloroethane	630-20-6	U	.0075	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,1,2,2-Tetrachloroethane	79-34-5	U	.01	0.021	0.028	mg/kg		8260B	05/08/15	21.25
Tetrachloroethene	127-18-4	U	.0079	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Toluene	108-88-3	U	.012	0.071	0.14	mg/kg		8260B	05/08/15	21.25
1,2,3-Trichlorobenzene UJ CCAL-L	87-61-6	U	.0087	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,2,4-Trichlorobenzene UJ CCAL-L	120-82-1	U	.011	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,1,1-Trichloroethane	71-55-6	U	.0081	0.014	0.028	mg/kg		8260B	05/08/15	21.25
1,1,2-Trichloroethane	79-00-5	U	.0079	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Trichloroethene	79-01-6	U	.0079	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Trichlorofluoromethane	75-69-4	U	.011	0.071	0.14	mg/kg		8260B	05/08/15	21.25
1,2,3-Trichloropropane	96-18-4	U	.021	0.028	0.071	mg/kg		8260B	05/08/15	21.25
1,2,4-Trimethylbenzene	95-63-6	U	.006	0.014	0.028	mg/kg		8260B	05/08/15	21.25

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L762679-01 (PH) - 7.4 at 21.1C

DNR: Do Not Report

KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W01-10-N

Collected By :
Collection Date : 04/29/15 12:15

ESC Sample # : L762679-01

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3,5-Trimethylbenzene	108-67-8	U	.0075	0.014	0.028	mg/kg		8260B	05/08/15	21.25
o-Xylene	95-47-6	U	.0096	0.014	0.028	mg/kg		8260B	05/08/15	21.25
m&p-Xylene	1330-20-7	U	.02	0.028	0.057	mg/kg		8260B	05/08/15	21.25
Vinyl chloride	75-01-4	U	.0083	0.014	0.028	mg/kg		8260B	05/08/15	21.25
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	05/08/15	1
Dibromofluoromethane	1868-53-7	99.1				% Rec.		8260B	05/08/15	1
4-Bromofluorobenzene	460-00-4	89.9				% Rec.		8260B	05/08/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FD-I		84.	2.1	2.7	5.4	mg/kg		8015	05/07/15	1
C28-C40 Oil Range		27.	.36	2.7	5.4	mg/kg		8015	05/07/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	50.9				% Rec.		8015	05/07/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene ~~J~~ LCS>I ~~>H~~, SQL-H	120-12-7	0.0048	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Acenaphthene F SQL-I	83-32-9	0.0055	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Acenaphthylene	208-96-8	U	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/07/15	1
Benzo(a)anthracene ~~J~~ LCS>~~H~~ SQL-H	56-55-3	0.0016	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Benzo(a)pyrene F SQL-I	50-32-8	0.0012	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Benzo(b)fluoranthene ~~F~~ ~~SQL-I~~ SQL-I	205-99-2	0.0015	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Benzo(g,h,i)perylene F SQL-I	191-24-2	0.0013	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Benzo(k)fluoranthene	207-08-9	U	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/07/15	1
Chrysene F SQL-I	218-01-9	0.0012	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Dibenz(a,h)anthracene	53-70-3	U	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/07/15	1
Fluoranthene F SQL-I	206-44-0	0.0024	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Fluorene	86-73-7	0.010	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/07/15	1
Indeno(1,2,3-cd)pyrene F SQL-I	193-39-5	0.00092	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Naphthalene	91-20-3	U	.0027	0.0080	0.027	mg/kg		8270C-SI	05/07/15	1
Phenanthrene	85-01-8	0.012	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/07/15	1
Pyrene F SQL-I	129-00-0	0.0072	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
1-Methylnaphthalene F SQL-I	90-12-0	0.0046	.0027	0.0080	0.027	mg/kg	J	8270C-SI	05/07/15	1
2-Methylnaphthalene	91-57-6	U	.0027	0.0080	0.027	mg/kg		8270C-SI	05/07/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	71.6				% Rec.		8270C-SI	05/07/15	1
Nitrobenzene-d5	4165-60-0	85.1				% Rec.		8270C-SI	05/07/15	1
2-Fluorobiphenyl	321-60-8	72.5				% Rec.		8270C-SI	05/07/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.22	0.44	mg/kg		8270C	05/11/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
Benzyl Alcohol	100-51-6	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
Carbazole	86-74-8	U	.007	0.22	0.44	mg/kg		8270C	05/11/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W01-10-N

Collected By :
Collection Date : 04/29/15 12:15

ESC Sample # : L762679-01

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzoic acid R	~~65-85-0~~	~~U~~	~~.16~~	~~2.2~~	~~4.4~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Dibenzofuran	132-64-9	U	.007	0.22	0.44	mg/kg		8270C	05/11/15	1
4-Bromophenyl-phenylether	101-55-3	U	.015	0.22	0.44	mg/kg		8270C	05/11/15	1
2-Chloronaphthalene	91-58-7	U	.0086	0.044	0.044	mg/kg		8270C	05/11/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0084	0.22	0.44	mg/kg		8270C	05/11/15	1
3,3-Dichlorobenzidine	91-94-1	U	.1	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4-Dinitrotoluene	121-14-2	U	.0082	0.22	0.44	mg/kg		8270C	05/11/15	1
2,6-Dinitrotoluene	606-20-2	U	.0099	0.22	0.44	mg/kg		8270C	05/11/15	1
Hexachlorobenzene	118-74-1	U	.012	0.22	0.44	mg/kg		8270C	05/11/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.013~~	~~0.22~~	~~0.44~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Hexachloroethane	67-72-1	U	.017	0.22	0.44	mg/kg		8270C	05/11/15	1
Isophorone	78-59-1	U	.007	0.22	0.44	mg/kg		8270C	05/11/15	1
Nitrobenzene	98-95-3	U	.0094	0.22	0.44	mg/kg		8270C	05/11/15	1
n-Nitrosodimethylamine	62-75-9	U	.087	0.22	0.44	mg/kg		8270C	05/11/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0079	0.22	0.44	mg/kg		8270C	05/11/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.22	0.44	mg/kg		8270C	05/11/15	1
Benzylbutyl phthalate	85-68-7	U	.013	0.22	0.44	mg/kg		8270C	05/11/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.016	0.22	0.44	mg/kg		8270C	05/11/15	1
Di-n-butyl phthalate	84-74-2	U	.015	0.22	0.44	mg/kg		8270C	05/11/15	1
Diethyl phthalate	84-66-2	U	.0092	0.22	0.44	mg/kg		8270C	05/11/15	1
Dimethyl phthalate	131-11-3	U	.0072	0.22	0.44	mg/kg		8270C	05/11/15	1
Di-n-octyl phthalate	117-84-0	U	.012	0.22	0.44	mg/kg		8270C	05/11/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.012~~	~~0.22~~	~~0.44~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0064	0.22	0.44	mg/kg		8270C	05/11/15	1
2-Chlorophenol	95-57-8	U	.011	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4-Dichlorophenol	120-83-2	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4-Dimethylphenol	105-67-9	U	.063	0.22	0.44	mg/kg		8270C	05/11/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.16	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4-Dinitrophenol	51-28-5	U	.13	0.22	0.44	mg/kg		8270C	05/11/15	1
2-Methylphenol	95-48-7	U	.013	0.22	0.44	mg/kg		8270C	05/11/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
2-Nitrophenol	88-75-5	U	.017	0.22	0.44	mg/kg		8270C	05/11/15	1
4-Nitrophenol	100-02-7	U	.07	0.22	0.44	mg/kg		8270C	05/11/15	1
4-Chloroaniline	106-47-8	U	.0047	0.22	0.44	mg/kg		8270C	05/11/15	1
2-Nitroaniline	88-74-4	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
1,2-Diphenylhydrazine	103-33-3	U	.0019	0.22	0.44	mg/kg		8270C	05/11/15	1
3-Nitroaniline	99-09-2	U	.011	0.22	0.44	mg/kg		8270C	05/11/15	1
4-Nitroaniline	100-01-6	U	.0086	0.22	0.44	mg/kg		8270C	05/11/15	1
Pentachlorophenol	87-86-5	U	.064	0.22	0.44	mg/kg		8270C	05/11/15	1
Phenol	108-95-2	U	.0094	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4,5-Trichlorophenol	95-95-4	U	.013	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4,6-Trichlorophenol	88-06-2	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	73.8				% Rec.		8270C	05/11/15	1

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L762679-01 (PH) - 7.4 at 21.1C

DNR: Do Not Report

KA 8/17/15

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W01-10-N

Collected By :
Collection Date : 04/29/15 12:15

ESC Sample # : L762679-01

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenol-d5	4165-62-2	75.8				% Rec.		8270C	05/11/15	1
Nitrobenzene-d5	4165-60-0	74.2				% Rec.		8270C	05/11/15	1
2-Fluorobiphenyl	321-60-8	63.3				% Rec.		8270C	05/11/15	1
2,4,6-Tribromophenol	118-79-6	84.3				% Rec.		8270C	05/11/15	1
p-Terphenyl-d14	1718-51-0	47.4				% Rec.		8270C	05/11/15	1

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L762679-01 (PH) - 7.4 at 21.1C

KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-02

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W02-10-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 12:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.6	.01			su		9045D	05/07/15	1
Total Solids	TSOLIDS	73.3	.0333			%		2540 G-2	05/06/15	1
Mercury	7439-97-6	U	.0038	0.014	0.027	mg/kg		7471A	05/06/15	1
Aluminum	7429-90-5	440	4.8	6.8	14.	mg/kg		6010B	05/11/15	1
Antimony UJ MSJ ICS-L	7440-36-0	U	1	1.4	2.7	mg/kg		6010B	05/11/15	1
Arsenic UJ ICS-L	7440-38-2	U	.89	1.4	2.7	mg/kg		6010B	05/11/15	1
Barium	7440-39-3	27.	.23	0.34	0.68	mg/kg		6010B	05/11/15	1
Beryllium	7440-41-7	U	.095	0.14	0.27	mg/kg		6010B	05/11/15	1
Cadmium UJ ICS-L	7440-43-9	U	.095	0.34	0.68	mg/kg		6010B	05/11/15	1
Chromium ~~f SQL-I~~ J F SQL, ICS-H	7440-47-3	0.63	.19	0.68	1.4	mg/kg	J	6010B	05/11/15	1
Cobalt	7440-48-4	U	.31	0.68	1.4	mg/kg		6010B	05/11/15	1
Copper	7440-50-8	U	.72	1.4	2.7	mg/kg		6010B	05/11/15	1
Lead ~~f SQL-I~~ FJ SQL, ICS-L	7439-92-1	0.49	.26	0.34	0.68	mg/kg	J	6010B	05/11/15	1
Manganese J MS-L	7439-96-5	19.	.16	0.68	1.4	mg/kg		6010B	05/11/15	1
Nickel UJ ICS-L	7440-02-0	U	.67	1.4	2.7	mg/kg		6010B	05/11/15	1
Selenium	7782-49-2	U	1	1.4	2.7	mg/kg		6010B	05/11/15	1
Silver	7440-22-4	U	.38	0.68	1.4	mg/kg		6010B	05/11/15	1
Thallium	7440-28-0	U	.89	1.4	2.7	mg/kg		6010B	05/11/15	1
Vanadium J ICS-H	7440-62-2	2.7	.33	1.4	2.7	mg/kg		6010B	05/11/15	1
Zinc ~~f SQL-I~~ FJ SQL, ICS-H	7440-66-6	1.6	.8	3.4	6.8	mg/kg	J	6010B	05/11/15	1
TPH (GC/FID) Low Fraction	8006-61-9	U	.63	1.4	2.9	mg/kg		8015D/GR	05/06/15	21
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	97.5				% Rec.		8015D/GR	05/06/15	1
Volatile Organics										
Acetone UJ CCAL-L	67-64-1	U	.3	0.73	1.5	mg/kg		8260B	05/08/15	21.5
Benzene	71-43-2	U	.0079	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Bromobenzene	108-86-1	U	.0083	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Bromochloromethane	74-97-5	U	.011	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Bromodichloromethane	75-27-4	U	.0075	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Bromoform	75-25-2	U	.012	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Bromomethane UJ CCAL-L	74-83-9	U	.04	0.073	0.15	mg/kg		8260B	05/08/15	21.5
n-Butylbenzene f SQL-I	104-51-8	0.012	.0075	0.015	0.029	mg/kg	J	8260B	05/08/15	21.5
sec-Butylbenzene	135-98-8	0.040	.0059	0.015	0.029	mg/kg		8260B	05/08/15	21.5
tert-Butylbenzene	98-06-6	U	.006	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Carbon Disulfide FJ SQL, CCAL-L	75-15-0	0.0095	.0082	0.015	0.029	mg/kg	J	8260B	05/08/15	21.5
Carbon tetrachloride	56-23-5	U	.0095	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Chlorobenzene	108-90-7	U	.0063	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Chlorodibromomethane	124-48-1	U	.011	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Chloroethane UJ CCAL-L	75-00-3	U	.027	0.073	0.15	mg/kg		8260B	05/08/15	21.5
Chloroform	67-66-3	U	.0067	0.073	0.15	mg/kg		8260B	05/08/15	21.5

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L762679-02 (PH) - 7.6 at 20.9C

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-02

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W02-10-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 12:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloromethane F SQL-I	74-87-3	0.020	.011	0.015	0.073	mg/kg	J	8260B	05/08/15	21.5
2-Chlorotoluene	95-49-8	U	.0089	0.015	0.029	mg/kg		8260B	05/08/15	21.5
4-Chlorotoluene	106-43-4	U	.0071	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,2-Dibromo-3-Chloropropane	96-12-8	U	.03	0.073	0.15	mg/kg		8260B	05/08/15	21.5
1,2-Dibromoethane	106-93-4	U	.01	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Dibromomethane	74-95-3	U	.011	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,2-Dichlorobenzene UJ CCAL-L	95-50-1	U	.009	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,3-Dichlorobenzene	541-73-1	U	.007	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,4-Dichlorobenzene	106-46-7	U	.0065	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Dichlorodifluoromethane	75-71-8	U	.02	0.073	0.15	mg/kg		8260B	05/08/15	21.5
1,1-Dichloroethane	75-34-3	U	.0059	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,2-Dichloroethane	107-06-2	U	.0078	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,1-Dichloroethene	75-35-4	U	.0089	0.015	0.029	mg/kg		8260B	05/08/15	21.5
cis-1,2-Dichloroethene	156-59-2	U	.0068	0.015	0.029	mg/kg		8260B	05/08/15	21.5
trans-1,2-Dichloroethene	156-60-5	U	.0078	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,2-Dichloropropane	78-87-5	U	.01	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,1-Dichloropropene	563-58-6	U	.0093	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,3-Dichloropropane	142-28-9	U	.006	0.015	0.029	mg/kg		8260B	05/08/15	21.5
cis-1,3-Dichloropropene	10061-01-5	U	.0076	0.015	0.029	mg/kg		8260B	05/08/15	21.5
trans-1,3-Dichloropropene	10061-02-6	U	.0078	0.015	0.029	mg/kg		8260B	05/08/15	21.5
2,2-Dichloropropane	594-20-7	U	.0082	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Ethylbenzene	100-41-4	U	.0087	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Hexachloro-1,3-butadiene UJ CCAL-L	87-68-3	U	.01	0.015	0.029	mg/kg		8260B	05/08/15	21.5
2-Hexanone	591-78-6	U	.11	0.15	0.29	mg/kg		8260B	05/08/15	21.5
Isopropylbenzene F SQL-I	98-82-8	0.014	.0071	0.015	0.029	mg/kg	J	8260B	05/08/15	21.5
p-Isopropyltoluene	99-87-6	U	.006	0.015	0.029	mg/kg		8260B	05/08/15	21.5
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	.14	0.15	0.29	mg/kg		8260B	05/08/15	21.5
Methylene Chloride UJ CCAL-L	75-09-2	U	.03	0.073	0.15	mg/kg		8260B	05/08/15	21.5
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.054	0.15	0.29	mg/kg		8260B	05/08/15	21.5
Methyl tert-butyl ether UJ CCAL-L	1634-04-4	U	.0063	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Naphthalene DNR	~~91-20-3~~	~~U~~	~~.03~~	~~0.073~~	~~0.15~~	~~mg/kg~~		~~8260B~~	~~05/08/15~~	~~21.5~~
n-Propylbenzene F SQL-I	103-65-1	0.0082	.006	0.015	0.029	mg/kg	J	8260B	05/08/15	21.5
Styrene	100-42-5	U	.0068	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,1,1,2-Tetrachloroethane	630-20-6	U	.0078	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,1,2,2-Tetrachloroethane	79-34-5	U	.011	0.022	0.029	mg/kg		8260B	05/08/15	21.5
Tetrachloroethene	127-18-4	U	.008	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Toluene	108-88-3	U	.013	0.073	0.15	mg/kg		8260B	05/08/15	21.5
1,2,3-Trichlorobenzene UJ CCAL-L	87-61-6	U	.009	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,2,4-Trichlorobenzene UJ CCAL-L	120-82-1	U	.011	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,1,1-Trichloroethane	71-55-6	U	.0084	0.015	0.029	mg/kg		8260B	05/08/15	21.5
1,1,2-Trichloroethane	79-00-5	U	.0082	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Trichloroethene	79-01-6	U	.0082	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Trichlorofluoromethane	75-69-4	U	.011	0.073	0.15	mg/kg		8260B	05/08/15	21.5
1,2,3-Trichloropropane	96-18-4	U	.022	0.029	0.073	mg/kg		8260B	05/08/15	21.5
1,2,4-Trimethylbenzene	95-63-6	U	.0061	0.015	0.029	mg/kg		8260B	05/08/15	21.5

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DNR: Do Not Report

KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-02

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W02-10-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 12:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3,5-Trimethylbenzene	108-67-8	U	.0078	0.015	0.029	mg/kg		8260B	05/08/15	21.5
o-Xylene	95-47-6	U	.01	0.015	0.029	mg/kg		8260B	05/08/15	21.5
m&p-Xylene	1330-20-7	U	.02	0.029	0.059	mg/kg		8260B	05/08/15	21.5
Vinyl chloride	75-01-4	U	.0084	0.015	0.029	mg/kg		8260B	05/08/15	21.5
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	05/08/15	1
Dibromofluoromethane	1868-53-7	88.9				% Rec.		8260B	05/08/15	1
4-Bromofluorobenzene	460-00-4	93.7				% Rec.		8260B	05/08/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FO-I		380	2.2	2.7	5.4	mg/kg		8015	05/07/15	1
C28-C40 Oil Range		7.6	.37	2.7	5.4	mg/kg		8015	05/07/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	67.5				% Rec.		8015	05/07/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene J LCS-H	120-12-7	0.016	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Acenaphthene	83-32-9	0.026	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Acenaphthylene F SQL-I	208-96-8	0.0040	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Benzo(a)anthracene FJ LCS-H, SQL-H	56-55-3	0.0010	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Benzo(a)pyrene	50-32-8	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(b)fluoranthene	205-99-2	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(k)fluoranthene	207-08-9	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Chrysene	218-01-9	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Fluoranthene	206-44-0	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Fluorene	86-73-7	0.063	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Naphthalene F SQL-I	91-20-3	0.0048	.0027	0.0082	0.027	mg/kg	J	8270C-SI	05/07/15	1
Phenanthrene	85-01-8	0.075	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Pyrene	129-00-0	0.018	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
1-Methylnaphthalene	90-12-0	0.045	.0027	0.0082	0.027	mg/kg		8270C-SI	05/07/15	1
2-Methylnaphthalene	91-57-6	U	.0027	0.0082	0.027	mg/kg		8270C-SI	05/07/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	76.7				% Rec.		8270C-SI	05/07/15	1
Nitrobenzene-d5	4165-60-0	98.4				% Rec.		8270C-SI	05/07/15	1
2-Fluorobiphenyl	321-60-8	73.8				% Rec.		8270C-SI	05/07/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.01	0.23	0.45	mg/kg		8270C	05/11/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.23	0.45	mg/kg		8270C	05/11/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.01	0.23	0.45	mg/kg		8270C	05/11/15	1
Benzyl Alcohol	100-51-6	U	.01	0.23	0.45	mg/kg		8270C	05/11/15	1
Carbazole	86-74-8	U	.0071	0.23	0.45	mg/kg		8270C	05/11/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
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Reported: 07/01/15 16:26 Revised: 07/02/15 14:23
L762679-02 (PH) - 7.6 at 20.9C

KA 8/17/15

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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-02

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W02-10-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 12:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzoic acid R	~~65-85-0~~	~~U~~	~~.16~~	~~2.3~~	~~4.5~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Dibenzofuran F SQL-I	132-64-9	0.033	.0071	0.23	0.45	mg/kg	J	8270C	05/11/15	1
4-Bromophenyl-phenylether	101-55-3	U	.015	0.23	0.45	mg/kg		8270C	05/11/15	1
2-Chloronaphthalene	91-58-7	U	.0087	0.045	0.045	mg/kg		8270C	05/11/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0086	0.23	0.45	mg/kg		8270C	05/11/15	1
3,3-Dichlorobenzidine	91-94-1	U	.11	0.23	0.45	mg/kg		8270C	05/11/15	1
2,4-Dinitrotoluene	121-14-2	U	.0083	0.23	0.45	mg/kg		8270C	05/11/15	1
2,6-Dinitrotoluene	606-20-2	U	.01	0.23	0.45	mg/kg		8270C	05/11/15	1
Hexachlorobenzene	118-74-1	U	.012	0.23	0.45	mg/kg		8270C	05/11/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.014~~	~~0.23~~	~~0.45~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Hexachloroethane	67-72-1	U	.018	0.23	0.45	mg/kg		8270C	05/11/15	1
Isophorone F SQL-I	78-59-1	0.0087	.0071	0.23	0.45	mg/kg	J	8270C	05/11/15	1
Nitrobenzene	98-95-3	U	.0095	0.23	0.45	mg/kg		8270C	05/11/15	1
n-Nitrosodimethylamine	62-75-9	U	.089	0.23	0.45	mg/kg		8270C	05/11/15	1
n-Nitrosodiphenylamine	86-30-6	U	.008	0.23	0.45	mg/kg		8270C	05/11/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.23	0.45	mg/kg		8270C	05/11/15	1
Benzylbutyl phthalate	85-68-7	U	.014	0.23	0.45	mg/kg		8270C	05/11/15	1
Bis(2-ethylhexyl)phthalate F SQL-I	117-81-7	0.10	.016	0.23	0.45	mg/kg	J	8270C	05/11/15	1
Di-n-butyl phthalate	84-74-2	U	.015	0.23	0.45	mg/kg		8270C	05/11/15	1
Diethyl phthalate	84-66-2	U	.0094	0.23	0.45	mg/kg		8270C	05/11/15	1
Dimethyl phthalate	131-11-3	U	.0074	0.23	0.45	mg/kg		8270C	05/11/15	1
Di-n-octyl phthalate F SQL-I	117-84-0	0.15	.012	0.23	0.45	mg/kg	J	8270C	05/11/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.012~~	~~0.23~~	~~0.45~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0065	0.23	0.45	mg/kg		8270C	05/11/15	1
2-Chlorophenol	95-57-8	U	.011	0.23	0.45	mg/kg		8270C	05/11/15	1
2,4-Dichlorophenol	120-83-2	U	.01	0.23	0.45	mg/kg		8270C	05/11/15	1
2,4-Dimethylphenol	105-67-9	U	.064	0.23	0.45	mg/kg		8270C	05/11/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.16	0.23	0.45	mg/kg		8270C	05/11/15	1
2,4-Dinitrophenol	51-28-5	U	.13	0.23	0.45	mg/kg		8270C	05/11/15	1
2-Methylphenol	95-48-7	U	.014	0.23	0.45	mg/kg		8270C	05/11/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.011	0.23	0.45	mg/kg		8270C	05/11/15	1
2-Nitrophenol	88-75-5	U	.018	0.23	0.45	mg/kg		8270C	05/11/15	1
4-Nitrophenol	100-02-7	U	.071	0.23	0.45	mg/kg		8270C	05/11/15	1
4-Chloroaniline	106-47-8	U	.0048	0.23	0.45	mg/kg		8270C	05/11/15	1
2-Nitroaniline	88-74-4	U	.01	0.23	0.45	mg/kg		8270C	05/11/15	1
1,2-Diphenylhydrazine	103-33-3	U	.0019	0.23	0.45	mg/kg		8270C	05/11/15	1
3-Nitroaniline	99-09-2	U	.012	0.23	0.45	mg/kg		8270C	05/11/15	1
4-Nitroaniline	100-01-6	U	.0087	0.23	0.45	mg/kg		8270C	05/11/15	1
Pentachlorophenol	87-86-5	U	.065	0.23	0.45	mg/kg		8270C	05/11/15	1
Phenol	108-95-2	U	.0095	0.23	0.45	mg/kg		8270C	05/11/15	1
2,4,5-Trichlorophenol	95-95-4	U	.014	0.23	0.45	mg/kg		8270C	05/11/15	1
2,4,6-Trichlorophenol	88-06-2	U	.011	0.23	0.45	mg/kg		8270C	05/11/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	75.0				% Rec.		8270C	05/11/15	1

Results listed are dry weight basis.
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Reported: 07/01/15 16:26 Revised: 07/02/15 14:23
L762679-02 (PH) - 7.6 at 20.9C

DNR: DO NOT REPORT

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-02

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W02-10-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 12:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenol-d5	4165-62-2	78.2				% Rec.		8270C	05/11/15	1
Nitrobenzene-d5	4165-60-0	78.7				% Rec.		8270C	05/11/15	1
2-Fluorobiphenyl	321-60-8	73.7				% Rec.		8270C	05/11/15	1
2,4,6-Tribromophenol	118-79-6	96.4				% Rec.		8270C	05/11/15	1
p-Terphenyl-d14	1718-51-0	57.1				% Rec.		8270C	05/11/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

ESC Sample # : L762679-03

Sample ID : TU518-EX02-F01-12.5-N

Site ID :

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 13:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.6	.01			su		9045D	05/07/15	1
Total Solids	TSOLIDS	70.6	.0333			%		2540 G-2	05/06/15	1
Mercury	7439-97-6	U	.004	0.014	0.028	mg/kg		7471A	05/06/15	1
Aluminum	7429-90-5	210	5	7.1	14.	mg/kg		6010B	05/11/15	1
Antimony UJ MS,ICS-L	7440-36-0	U	1.1	1.4	2.8	mg/kg		6010B	05/11/15	1
Arsenic UJ ICS-L	7440-38-2	U	.92	1.4	2.8	mg/kg		6010B	05/11/15	1
Barium	7440-39-3	18.	.24	0.35	0.71	mg/kg		6010B	05/11/15	1
Beryllium	7440-41-7	U	.099	0.14	0.28	mg/kg		6010B	05/11/15	1
Cadmium UJ ICS-L	7440-43-9	U	.099	0.35	0.71	mg/kg		6010B	05/11/15	1
Chromium FJ SQL, ICS-H	7440-47-3	0.38	.2	0.71	1.4	mg/kg	J	6010B	05/11/15	1
Cobalt	7440-48-4	U	.32	0.71	1.4	mg/kg		6010B	05/11/15	1
Copper	7440-50-8	U	.75	1.4	2.8	mg/kg		6010B	05/11/15	1
Lead J ICS-H L	7439-92-1	0.89	.27	0.35	0.71	mg/kg		6010B	05/11/15	1
Manganese J MS-L	7439-96-5	13.	.17	0.71	1.4	mg/kg		6010B	05/11/15	1
Nickel J ICS-L	7440-02-0	U	.69	1.4	2.8	mg/kg		6010B	05/11/15	1
Selenium FJ MS-H, SQL, ICS-H	7782-49-2	1.8	1	1.4	2.8	mg/kg	J	6010B	05/11/15	1
Silver	7440-22-4	U	.4	0.71	1.4	mg/kg		6010B	05/11/15	1
Thallium	7440-28-0	U	.92	1.4	2.8	mg/kg		6010B	05/11/15	1
Vanadium FJ SQL, ICS-H	7440-62-2	1.4	.34	1.4	2.8	mg/kg	J	6010B	05/11/15	1
Zinc ~~F SQL-I~~ F J SQL, ICS-H	7440-66-6	1.1	.84	3.5	7.1	mg/kg	J	6010B	05/11/15	1
TPH (GC/FID) Low Fraction	8006-61-9	U	.59	1.4	2.8	mg/kg		8015D/GR	05/06/15	19.5
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	98.2				% Rec.		8015D/GR	05/06/15	1
Volatile Organics										
Acetone UJ CCAL-L	67-64-1	U	.28	0.71	1.4	mg/kg		8260B	05/08/15	20
Benzene	71-43-2	U	.0076	0.014	0.028	mg/kg		8260B	05/08/15	20
Bromobenzene	108-86-1	U	.0081	0.014	0.028	mg/kg		8260B	05/08/15	20
Bromochloromethane	74-97-5	U	.011	0.014	0.028	mg/kg		8260B	05/08/15	20
Bromodichloromethane	75-27-4	U	.0072	0.014	0.028	mg/kg		8260B	05/08/15	20
Bromoform	75-25-2	U	.012	0.014	0.028	mg/kg		8260B	05/08/15	20
Bromomethane UJ CCAL-L	74-83-9	U	.038	0.071	0.14	mg/kg		8260B	05/08/15	20
n-Butylbenzene	104-51-8	U	.0074	0.014	0.028	mg/kg		8260B	05/08/15	20
sec-Butylbenzene F SQL-I	135-98-8	0.017	.0057	0.014	0.028	mg/kg	J	8260B	05/08/15	20
tert-Butylbenzene	98-06-6	U	.0058	0.014	0.028	mg/kg		8260B	05/08/15	20
Carbon Disulfide UJ CCAL-L	75-15-0	U	.0079	0.014	0.028	mg/kg		8260B	05/08/15	20
Carbon tetrachloride	56-23-5	U	.0093	0.014	0.028	mg/kg		8260B	05/08/15	20
Chlorobenzene	108-90-7	U	.0059	0.014	0.028	mg/kg		8260B	05/08/15	20
Chlorodibromomethane	124-48-1	U	.011	0.014	0.028	mg/kg		8260B	05/08/15	20
Chloroethane UJ CCAL-L	75-00-3	U	.027	0.071	0.14	mg/kg		8260B	05/08/15	20
Chloroform	67-66-3	U	.0065	0.071	0.14	mg/kg		8260B	05/08/15	20

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KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-F01-12.5-N

Collected By :
Collection Date : 04/29/15 13:00

ESC Sample # : L762679-03

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloromethane	74-87-3	U	.011	0.014	0.071	mg/kg		8260B	05/08/15	20
2-Chlorotoluene	95-49-8	U	.0085	0.014	0.028	mg/kg		8260B	05/08/15	20
4-Chlorotoluene	106-43-4	U	.0068	0.014	0.028	mg/kg		8260B	05/08/15	20
1,2-Dibromo-3-Chloropropane	96-12-8	U	.03	0.071	0.14	mg/kg		8260B	05/08/15	20
1,2-Dibromoethane	106-93-4	U	.0098	0.014	0.028	mg/kg		8260B	05/08/15	20
Dibromomethane	74-95-3	U	.011	0.014	0.028	mg/kg		8260B	05/08/15	20
1,2-Dichlorobenzene US CCAL-L	95-50-1	U	.0086	0.014	0.028	mg/kg		8260B	05/08/15	20
1,3-Dichlorobenzene	541-73-1	U	.0068	0.014	0.028	mg/kg		8260B	05/08/15	20
1,4-Dichlorobenzene	106-46-7	U	.0064	0.014	0.028	mg/kg		8260B	05/08/15	20
Dichlorodifluoromethane	75-71-8	U	.02	0.071	0.14	mg/kg		8260B	05/08/15	20
1,1-Dichloroethane	75-34-3	U	.0057	0.014	0.028	mg/kg		8260B	05/08/15	20
1,2-Dichloroethane	107-06-2	U	.0075	0.014	0.028	mg/kg		8260B	05/08/15	20
1,1-Dichloroethene	75-35-4	U	.0086	0.014	0.028	mg/kg		8260B	05/08/15	20
cis-1,2-Dichloroethene	156-59-2	U	.0066	0.014	0.028	mg/kg		8260B	05/08/15	20
trans-1,2-Dichloroethene	156-60-5	U	.0075	0.014	0.028	mg/kg		8260B	05/08/15	20
1,2-Dichloropropane	78-87-5	U	.01	0.014	0.028	mg/kg		8260B	05/08/15	20
1,1-Dichloropropene	563-58-6	U	.0089	0.014	0.028	mg/kg		8260B	05/08/15	20
1,3-Dichloropropane	142-28-9	U	.0058	0.014	0.028	mg/kg		8260B	05/08/15	20
cis-1,3-Dichloropropene	10061-01-5	U	.0074	0.014	0.028	mg/kg		8260B	05/08/15	20
trans-1,3-Dichloropropene	10061-02-6	U	.0075	0.014	0.028	mg/kg		8260B	05/08/15	20
2,2-Dichloropropane	594-20-7	U	.0079	0.014	0.028	mg/kg		8260B	05/08/15	20
Ethylbenzene	100-41-4	U	.0084	0.014	0.028	mg/kg		8260B	05/08/15	20
Hexachloro-1,3-butadiene US CCAL-L	87-68-3	U	.0096	0.014	0.028	mg/kg		8260B	05/08/15	20
2-Hexanone	591-78-6	U	.11	0.14	0.28	mg/kg		8260B	05/08/15	20
Isopropylbenzene	98-82-8	U	.0069	0.014	0.028	mg/kg		8260B	05/08/15	20
p-Isopropyltoluene	99-87-6	U	.0058	0.014	0.028	mg/kg		8260B	05/08/15	20
2-Butanone (MEK) US CCAL-L	78-93-3	U	.13	0.14	0.28	mg/kg		8260B	05/08/15	20
Methylene Chloride US CCAL-L	75-09-2	U	.028	0.071	0.14	mg/kg		8260B	05/08/15	20
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.054	0.14	0.28	mg/kg		8260B	05/08/15	20
Methyl tert-butyl ether US CCAL-L	1634-04-4	U	.0059	0.014	0.028	mg/kg		8260B	05/08/15	20
~~Naphthalene DNR~~	~~91-20-3~~	~~U~~	~~.028~~	~~0.071~~	~~0.14~~	~~mg/kg~~		~~8260B~~	~~05/08/15~~	~~20~~
n-Propylbenzene	103-65-1	U	.0058	0.014	0.028	mg/kg		8260B	05/08/15	20
Styrene	100-42-5	U	.0066	0.014	0.028	mg/kg		8260B	05/08/15	20
1,1,1,2-Tetrachloroethane	630-20-6	U	.0075	0.014	0.028	mg/kg		8260B	05/08/15	20
1,1,2,2-Tetrachloroethane	79-34-5	U	.01	0.021	0.028	mg/kg		8260B	05/08/15	20
Tetrachloroethene	127-18-4	U	.0078	0.014	0.028	mg/kg		8260B	05/08/15	20
Toluene	108-88-3	U	.012	0.071	0.14	mg/kg		8260B	05/08/15	20
1,2,3-Trichlorobenzene US CCAL-L	87-61-6	U	.0086	0.014	0.028	mg/kg		8260B	05/08/15	20
1,2,4-Trichlorobenzene US CCAL-L	120-82-1	U	.011	0.014	0.028	mg/kg		8260B	05/08/15	20
1,1,1-Trichloroethane	71-55-6	U	.0081	0.014	0.028	mg/kg		8260B	05/08/15	20
1,1,2-Trichloroethane	79-00-5	U	.0078	0.014	0.028	mg/kg		8260B	05/08/15	20
Trichloroethene	79-01-6	U	.0079	0.014	0.028	mg/kg		8260B	05/08/15	20
Trichlorofluoromethane	75-69-4	U	.011	0.071	0.14	mg/kg		8260B	05/08/15	20
1,2,3-Trichloropropane	96-18-4	U	.021	0.028	0.071	mg/kg		8260B	05/08/15	20
1,2,4-Trimethylbenzene	95-63-6	U	.0059	0.014	0.028	mg/kg		8260B	05/08/15	20

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L762679-03 (PH) - 7.6 at 20.8C

DNR: Do Not Report

KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-03

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-F01-12.5-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 13:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3,5-Trimethylbenzene	108-67-8	U	.0075	0.014	0.028	mg/kg		8260B	05/08/15	20
o-Xylene	95-47-6	U	.0096	0.014	0.028	mg/kg		8260B	05/08/15	20
m&p-Xylene	1330-20-7	U	.02	0.028	0.057	mg/kg		8260B	05/08/15	20
Vinyl chloride	75-01-4	U	.0082	0.014	0.028	mg/kg		8260B	05/08/15	20
Surrogate Recovery										
Toluene-d8	2037-26-5	102.				% Rec.		8260B	05/08/15	1
Dibromofluoromethane	1868-53-7	88.0				% Rec.		8260B	05/08/15	1
4-Bromofluorobenzene	460-00-4	117.				% Rec.		8260B	05/08/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range FJ SQL,SUR-X,FD-L		4.8	2.3	2.8	5.7	mg/kg	J	8015	05/08/15	1
C28-C40 Oil Range UJ SUR-L		U	.38	2.8	5.7	mg/kg		8015	05/08/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	38.6				% Rec.	J2	8015	05/08/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene ~~J SQL-H~~	120-12-7	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Acenaphthene F SQL-I	83-32-9	0.0012	.00085	0.0028	0.0085	mg/kg	J	8270C-SI	05/07/15	1
Acenaphthylene	208-96-8	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Benzo(a)anthracene ~~J~~	56-55-3	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Benzo(a)pyrene	50-32-8	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Benzo(b)fluoranthene	205-99-2	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Benzo(k)fluoranthene	207-08-9	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Chrysene	218-01-9	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Fluoranthene	206-44-0	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Fluorene F SQL-I	86-73-7	0.0048	.00085	0.0028	0.0085	mg/kg	J	8270C-SI	05/07/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Naphthalene	91-20-3	U	.0028	0.0085	0.028	mg/kg		8270C-SI	05/07/15	1
Phenanthrene F SQL-I	85-01-8	0.0035	.00085	0.0028	0.0085	mg/kg	J	8270C-SI	05/07/15	1
Pyrene F SQL-I	129-00-0	0.0010	.00085	0.0028	0.0085	mg/kg	J	8270C-SI	05/07/15	1
1-Methylnaphthalene	90-12-0	U	.0028	0.0085	0.028	mg/kg		8270C-SI	05/07/15	1
2-Methylnaphthalene	91-57-6	U	.0028	0.0085	0.028	mg/kg		8270C-SI	05/07/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	77.9				% Rec.		8270C-SI	05/07/15	1
Nitrobenzene-d5	4165-60-0	83.3				% Rec.		8270C-SI	05/07/15	1
2-Fluorobiphenyl	321-60-8	78.5				% Rec.		8270C-SI	05/07/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.013	0.24	0.47	mg/kg		8270C	05/11/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
Benzyl Alcohol	100-51-6	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
Carbazole	86-74-8	U	.0074	0.24	0.47	mg/kg		8270C	05/11/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-03

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-F01-12.5-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 13:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzoic acid R	~~65-85-0~~	~~U~~	~~.17~~	~~2.4~~	~~4.7~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Dibenzofuran	132-64-9	U	.0074	0.24	0.47	mg/kg		8270C	05/11/15	1
4-Bromophenyl-phenylether	101-55-3	U	.016	0.24	0.47	mg/kg		8270C	05/11/15	1
2-Chloronaphthalene	91-58-7	U	.0091	0.047	0.047	mg/kg		8270C	05/11/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0089	0.24	0.47	mg/kg		8270C	05/11/15	1
3,3-Dichlorobenzidine	91-94-1	U	.11	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4-Dinitrotoluene	121-14-2	U	.0086	0.24	0.47	mg/kg		8270C	05/11/15	1
2,6-Dinitrotoluene	606-20-2	U	.01	0.24	0.47	mg/kg		8270C	05/11/15	1
Hexachlorobenzene	118-74-1	U	.012	0.24	0.47	mg/kg		8270C	05/11/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.014~~	~~0.24~~	~~0.47~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Hexachloroethane	67-72-1	U	.018	0.24	0.47	mg/kg		8270C	05/11/15	1
Isophorone	78-59-1	U	.0074	0.24	0.47	mg/kg		8270C	05/11/15	1
Nitrobenzene	98-95-3	U	.0099	0.24	0.47	mg/kg		8270C	05/11/15	1
n-Nitrosodimethylamine	62-75-9	U	.092	0.24	0.47	mg/kg		8270C	05/11/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0084	0.24	0.47	mg/kg		8270C	05/11/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.013	0.24	0.47	mg/kg		8270C	05/11/15	1
Benzylbutyl phthalate	85-68-7	U	.014	0.24	0.47	mg/kg		8270C	05/11/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.017	0.24	0.47	mg/kg		8270C	05/11/15	1
Di-n-butyl phthalate	84-74-2	U	.016	0.24	0.47	mg/kg		8270C	05/11/15	1
Diethyl phthalate	84-66-2	U	.0098	0.24	0.47	mg/kg		8270C	05/11/15	1
Dimethyl phthalate	131-11-3	U	.0076	0.24	0.47	mg/kg		8270C	05/11/15	1
Di-n-octyl phthalate	117-84-0	U	.013	0.24	0.47	mg/kg		8270C	05/11/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.012~~	~~0.24~~	~~0.47~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0068	0.24	0.47	mg/kg		8270C	05/11/15	1
2-Chlorophenol	95-57-8	U	.012	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4-Dichlorophenol	120-83-2	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4-Dimethylphenol	105-67-9	U	.066	0.24	0.47	mg/kg		8270C	05/11/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.17	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4-Dinitrophenol	51-28-5	U	.14	0.24	0.47	mg/kg		8270C	05/11/15	1
2-Methylphenol	95-48-7	U	.014	0.24	0.47	mg/kg		8270C	05/11/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
2-Nitrophenol	88-75-5	U	.018	0.24	0.47	mg/kg		8270C	05/11/15	1
4-Nitrophenol	100-02-7	U	.074	0.24	0.47	mg/kg		8270C	05/11/15	1
4-Chloroaniline	106-47-8	U	.005	0.24	0.47	mg/kg		8270C	05/11/15	1
2-Nitroaniline	88-74-4	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
1,2-Diphenylhydrazine	103-33-3	U	.002	0.24	0.47	mg/kg		8270C	05/11/15	1
3-Nitroaniline	99-09-2	U	.012	0.24	0.47	mg/kg		8270C	05/11/15	1
4-Nitroaniline	100-01-6	U	.0091	0.24	0.47	mg/kg		8270C	05/11/15	1
Pentachlorophenol	87-86-5	U	.068	0.24	0.47	mg/kg		8270C	05/11/15	1
Phenol	108-95-2	U	.0099	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4,5-Trichlorophenol	95-95-4	U	.014	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4,6-Trichlorophenol	88-06-2	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	68.5				% Rec.		8270C	05/11/15	1

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DNR: Do Not Report

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-03

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-F01-12.5-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 13:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenol-d5	4165-62-2	71.2				% Rec.		8270C	05/11/15	1
Nitrobenzene-d5	4165-60-0	67.4				% Rec.		8270C	05/11/15	1
2-Fluorobiphenyl	321-60-8	58.3				% Rec.		8270C	05/11/15	1
2,4,6-Tribromophenol	118-79-6	88.7				% Rec.		8270C	05/11/15	1
p-Terphenyl-d14	1718-51-0	34.1				% Rec.		8270C	05/11/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-04

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-F02-13-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 15:05

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.6	.01			su		9045D	05/07/15	1
Total Solids	TSOLIDS	70.3	.0333			%		2540 G-2	05/06/15	1
Mercury F SQL-I	7439-97-6	0.0064	.004	0.014	0.028	mg/kg	J	7471A	05/06/15	1
Aluminum	7429-90-5	410	5	7.1	14.	mg/kg		6010B	05/11/15	1
Antimony UJ MS,ICS-L	7440-36-0	U	1.1	1.4	2.8	mg/kg		6010B	05/11/15	1
Arsenic UJ ICS-L	7440-38-2	U	.92	1.4	2.8	mg/kg		6010B	05/11/15	1
Barium	7440-39-3	34.	.24	0.36	0.71	mg/kg		6010B	05/11/15	1
Beryllium UJ ICS-L	7440-41-7	U	.1	0.14	0.28	mg/kg		6010B	05/11/15	1
Cadmium	7440-43-9	U	.1	0.36	0.71	mg/kg		6010B	05/11/15	1
Chromium FJ SQL,ICS-H	7440-47-3	0.65	.2	0.71	1.4	mg/kg	J	6010B	05/11/15	1
Cobalt	7440-48-4	U	.33	0.71	1.4	mg/kg		6010B	05/11/15	1
Copper	7440-50-8	U	.75	1.4	2.8	mg/kg		6010B	05/11/15	1
Lead J ICS-L	7439-92-1	1.1	.27	0.36	0.71	mg/kg		6010B	05/11/15	1
Manganese J MS-L	7439-96-5	23.	.17	0.71	1.4	mg/kg		6010B	05/11/15	1
Nickel UJ ICS-L	7440-02-0	U	.7	1.4	2.8	mg/kg		6010B	05/11/15	1
Selenium UJ MS-H, SQL, ICS-H	7782-49-2	1.3	1	1.4	2.8	mg/kg	J	6010B	05/11/15	1
Silver	7440-22-4	U	.4	0.71	1.4	mg/kg		6010B	05/11/15	1
Thallium	7440-28-0	U	.92	1.4	2.8	mg/kg		6010B	05/11/15	1
Vanadium FJ SQL,ICS-H	7440-62-2	2.0	.34	1.4	2.8	mg/kg	J	6010B	05/11/15	1
Zinc ~~F SQL-I~~ FJ SQL,ICS-H	7440-66-6	1.6	.84	3.6	7.1	mg/kg	J	6010B	05/11/15	1
TPH (GC/FID) Low Fraction	8006-61-9	U	.62	1.5	2.9	mg/kg		8015D/GR	05/07/15	20.5
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	97.3				% Rec.		8015D/GR	05/07/15	1
Volatile Organics										
Acetone UJ CCAL-L	67-64-1	U	.3	0.74	1.5	mg/kg		8260B	05/08/15	20.75
Benzene	71-43-2	U	.008	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Bromobenzene	108-86-1	U	.0084	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Bromochloromethane	74-97-5	U	.012	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Bromodichloromethane	75-27-4	U	.0075	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Bromoform	75-25-2	U	.012	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Bromomethane UJ CCAL-L	74-83-9	U	.04	0.074	0.15	mg/kg		8260B	05/08/15	20.75
n-Butylbenzene	104-51-8	U	.0077	0.015	0.030	mg/kg		8260B	05/08/15	20.75
sec-Butylbenzene	135-98-8	U	.006	0.015	0.030	mg/kg		8260B	05/08/15	20.75
tert-Butylbenzene	98-06-6	U	.0061	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Carbon Disulfide UJ CCAL-L	75-15-0	U	.0082	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Carbon tetrachloride	56-23-5	U	.0097	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Chlorobenzene	108-90-7	U	.0062	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Chlorodibromomethane	124-48-1	U	.011	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Chloroethane UJ CCAL-L	75-00-3	U	.028	0.074	0.15	mg/kg		8260B	05/08/15	20.75
Chloroform	67-66-3	U	.0068	0.074	0.15	mg/kg		8260B	05/08/15	20.75

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L762679-04 (PH) - 7.6 at 20.4C

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-F02-13-N

Collected By :
Collection Date : 04/29/15 15:05

ESC Sample # : L762679-04

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloromethane	74-87-3	U	.011	0.015	0.074	mg/kg		8260B	05/08/15	20.75
2-Chlorotoluene	95-49-8	U	.0088	0.015	0.030	mg/kg		8260B	05/08/15	20.75
4-Chlorotoluene	106-43-4	U	.0071	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,2-Dibromo-3-Chloropropane	96-12-8	U	.031	0.074	0.15	mg/kg		8260B	05/08/15	20.75
1,2-Dibromoethane	106-93-4	U	.01	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Dibromomethane	74-95-3	U	.011	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,2-Dichlorobenzene US CCAL-L	95-50-1	U	.009	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,3-Dichlorobenzene	541-73-1	U	.0071	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,4-Dichlorobenzene	106-46-7	U	.0067	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Dichlorodifluoromethane	75-71-8	U	.021	0.074	0.15	mg/kg		8260B	05/08/15	20.75
1,1-Dichloroethane	75-34-3	U	.0058	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,2-Dichloroethane	107-06-2	U	.0078	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,1-Dichloroethene	75-35-4	U	.009	0.015	0.030	mg/kg		8260B	05/08/15	20.75
cis-1,2-Dichloroethene	156-59-2	U	.007	0.015	0.030	mg/kg		8260B	05/08/15	20.75
trans-1,2-Dichloroethene	156-60-5	U	.0078	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,2-Dichloropropane	78-87-5	U	.01	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,1-Dichloropropene	563-58-6	U	.0094	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,3-Dichloropropane	142-28-9	U	.0061	0.015	0.030	mg/kg		8260B	05/08/15	20.75
cis-1,3-Dichloropropene	10061-01-5	U	.0077	0.015	0.030	mg/kg		8260B	05/08/15	20.75
trans-1,3-Dichloropropene	10061-02-6	U	.0078	0.015	0.030	mg/kg		8260B	05/08/15	20.75
2,2-Dichloropropane	594-20-7	U	.0082	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Ethylbenzene	100-41-4	U	.0088	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Hexachloro-1,3-butadiene US CCAL-L	87-68-3	U	.01	0.015	0.030	mg/kg		8260B	05/08/15	20.75
2-Hexanone	591-78-6	U	.11	0.15	0.30	mg/kg		8260B	05/08/15	20.75
Isopropylbenzene	98-82-8	U	.0071	0.015	0.030	mg/kg		8260B	05/08/15	20.75
p-Isopropyltoluene	99-87-6	U	.006	0.015	0.030	mg/kg		8260B	05/08/15	20.75
2-Butanone (MEK) US CCAL-L	78-93-3	U	.14	0.15	0.30	mg/kg		8260B	05/08/15	20.75
Methylene Chloride US CCAL-L	75-09-2	U	.03	0.074	0.15	mg/kg		8260B	05/08/15	20.75
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.055	0.15	0.30	mg/kg		8260B	05/08/15	20.75
Methyl tert-butyl ether US CCAL-L	1634-04-4	U	.0062	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Naphthalene DNR	~~91-20-3~~	~~U~~	~~.03~~	~~0.074~~	~~0.15~~	~~mg/kg~~		~~8260B~~	~~05/08/15~~	~~20.75~~
n-Propylbenzene	103-65-1	U	.0061	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Styrene	100-42-5	U	.0068	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,1,1,2-Tetrachloroethane	630-20-6	U	.0078	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,1,2,2-Tetrachloroethane	79-34-5	U	.011	0.022	0.030	mg/kg		8260B	05/08/15	20.75
Tetrachloroethene	127-18-4	U	.0081	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Toluene	108-88-3	U	.013	0.074	0.15	mg/kg		8260B	05/08/15	20.75
1,2,3-Trichlorobenzene US CCAL-L	87-61-6	U	.009	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,2,4-Trichlorobenzene US CCAL-L	120-82-1	U	.011	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,1,1-Trichloroethane	71-55-6	U	.0084	0.015	0.030	mg/kg		8260B	05/08/15	20.75
1,1,2-Trichloroethane	79-00-5	U	.0081	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Trichloroethene	79-01-6	U	.0082	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Trichlorofluoromethane	75-69-4	U	.011	0.074	0.15	mg/kg		8260B	05/08/15	20.75
1,2,3-Trichloropropane	96-18-4	U	.021	0.030	0.074	mg/kg		8260B	05/08/15	20.75
1,2,4-Trimethylbenzene	95-63-6	U	.0062	0.015	0.030	mg/kg		8260B	05/08/15	20.75

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L762679-04 (PH) - 7.6 at 20.4C

DNR: DO NOT REPORT

KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-04

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-F02-13-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 15:05

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3,5-Trimethylbenzene	108-67-8	U	.0078	0.015	0.030	mg/kg		8260B	05/08/15	20.75
o-Xylene	95-47-6	U	.01	0.015	0.030	mg/kg		8260B	05/08/15	20.75
m&p-Xylene	1330-20-7	U	.021	0.030	0.059	mg/kg		8260B	05/08/15	20.75
Vinyl chloride	75-01-4	U	.0085	0.015	0.030	mg/kg		8260B	05/08/15	20.75
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	05/08/15	1
Dibromofluoromethane	1868-53-7	101.				% Rec.		8260B	05/08/15	1
4-Bromofluorobenzene	460-00-4	87.7				% Rec.		8260B	05/08/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FQ-I		12.	2.3	2.8	5.7	mg/kg		8015	05/07/15	1
C28-C40 Oil Range E SQL-I		3.6	.38	2.8	5.7	mg/kg	J	8015	05/07/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	70.2				% Rec.		8015	05/07/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Acenaphthene	83-32-9	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Acenaphthylene	208-96-8	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Benzo(a)anthracene	56-55-3	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Benzo(a)pyrene	50-32-8	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Benzo(b)fluoranthene	205-99-2	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Benzo(k)fluoranthene	207-08-9	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Chrysene	218-01-9	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Fluoranthene	206-44-0	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Fluorene U MB-I	86-73-7	~~0.0014~~ 0.0028	~~.00085~~ 0.0014	0.0028	0.0085	mg/kg	J	8270C-SI	05/07/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Naphthalene	91-20-3	U	.0028	0.0085	0.028	mg/kg		8270C-SI	05/07/15	1
Phenanthrene	85-01-8	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
Pyrene	129-00-0	U	.00085	0.0028	0.0085	mg/kg		8270C-SI	05/07/15	1
1-Methylnaphthalene	90-12-0	U	.0028	0.0085	0.028	mg/kg		8270C-SI	05/07/15	1
2-Methylnaphthalene	91-57-6	U	.0028	0.0085	0.028	mg/kg		8270C-SI	05/07/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	73.2				% Rec.		8270C-SI	05/07/15	1
Nitrobenzene-d5	4165-60-0	94.5				% Rec.		8270C-SI	05/07/15	1
2-Fluorobiphenyl	321-60-8	80.0				% Rec.		8270C-SI	05/07/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.013	0.24	0.47	mg/kg		8270C	05/11/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
Benzyl Alcohol	100-51-6	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
Carbazole	86-74-8	U	.0074	0.24	0.47	mg/kg		8270C	05/11/15	1

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L762679-04 (PH) - 7.6 at 20.4C

KA 8/10/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-04

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-F02-13-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 15:05

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzoic acid R	~~65-85-0~~	~~U~~	~~.17~~	~~2.4~~	~~4.7~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Dibenzofuran	132-64-9	U	.0074	0.24	0.47	mg/kg		8270C	05/11/15	1
4-Bromophenyl-phenylether	101-55-3	U	.016	0.24	0.47	mg/kg		8270C	05/11/15	1
2-Chloronaphthalene	91-58-7	U	.0091	0.047	0.047	mg/kg		8270C	05/11/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.009	0.24	0.47	mg/kg		8270C	05/11/15	1
3,3-Dichlorobenzidine	91-94-1	U	.11	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4-Dinitrotoluene	121-14-2	U	.0087	0.24	0.47	mg/kg		8270C	05/11/15	1
2,6-Dinitrotoluene	606-20-2	U	.01	0.24	0.47	mg/kg		8270C	05/11/15	1
Hexachlorobenzene	118-74-1	U	.012	0.24	0.47	mg/kg		8270C	05/11/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.014~~	~~0.24~~	~~0.47~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Hexachloroethane	67-72-1	U	.018	0.24	0.47	mg/kg		8270C	05/11/15	1
Isophorone	78-59-1	U	.0074	0.24	0.47	mg/kg		8270C	05/11/15	1
Nitrobenzene	98-95-3	U	.01	0.24	0.47	mg/kg		8270C	05/11/15	1
n-Nitrosodimethylamine	62-75-9	U	.092	0.24	0.47	mg/kg		8270C	05/11/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0084	0.24	0.47	mg/kg		8270C	05/11/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.013	0.24	0.47	mg/kg		8270C	05/11/15	1
Benzylbutyl phthalate	85-68-7	U	.014	0.24	0.47	mg/kg		8270C	05/11/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.017	0.24	0.47	mg/kg		8270C	05/11/15	1
Di-n-butyl phthalate	84-74-2	U	.016	0.24	0.47	mg/kg		8270C	05/11/15	1
Diethyl phthalate	84-66-2	U	.0098	0.24	0.47	mg/kg		8270C	05/11/15	1
Dimethyl phthalate	131-11-3	U	.0077	0.24	0.47	mg/kg		8270C	05/11/15	1
Di-n-octyl phthalate	117-84-0	U	.013	0.24	0.47	mg/kg		8270C	05/11/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.012~~	~~0.24~~	~~0.47~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0068	0.24	0.47	mg/kg		8270C	05/11/15	1
2-Chlorophenol	95-57-8	U	.012	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4-Dichlorophenol	120-83-2	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4-Dimethylphenol	105-67-9	U	.067	0.24	0.47	mg/kg		8270C	05/11/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.17	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4-Dinitrophenol	51-28-5	U	.14	0.24	0.47	mg/kg		8270C	05/11/15	1
2-Methylphenol	95-48-7	U	.014	0.24	0.47	mg/kg		8270C	05/11/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
2-Nitrophenol	88-75-5	U	.018	0.24	0.47	mg/kg		8270C	05/11/15	1
4-Nitrophenol	100-02-7	U	.074	0.24	0.47	mg/kg		8270C	05/11/15	1
4-Chloroaniline	106-47-8	U	.005	0.24	0.47	mg/kg		8270C	05/11/15	1
2-Nitroaniline	88-74-4	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
1,2-Diphenylhydrazine	103-33-3	U	.002	0.24	0.47	mg/kg		8270C	05/11/15	1
3-Nitroaniline	99-09-2	U	.012	0.24	0.47	mg/kg		8270C	05/11/15	1
4-Nitroaniline	100-01-6	U	.0091	0.24	0.47	mg/kg		8270C	05/11/15	1
Pentachlorophenol	87-86-5	U	.068	0.24	0.47	mg/kg		8270C	05/11/15	1
Phenol	108-95-2	U	.01	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4,5-Trichlorophenol	95-95-4	U	.014	0.24	0.47	mg/kg		8270C	05/11/15	1
2,4,6-Trichlorophenol	88-06-2	U	.011	0.24	0.47	mg/kg		8270C	05/11/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	71.2				% Rec.		8270C	05/11/15	1

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L762679-04 (PH) - 7.6 at 20.4C

DNR: Do Not Report

KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-04

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-F02-13-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 15:05

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenol-d5	4165-62-2	72.5				% Rec.		8270C	05/11/15	1
Nitrobenzene-d5	4165-60-0	70.5				% Rec.		8270C	05/11/15	1
2-Fluorobiphenyl	321-60-8	63.9				% Rec.		8270C	05/11/15	1
2,4,6-Tribromophenol	118-79-6	86.7				% Rec.		8270C	05/11/15	1
p-Terphenyl-d14	1718-51-0	37.7				% Rec.		8270C	05/11/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

ESC Sample # : L762679-05

Sample ID : TU518-EX02-W03-10-N

Site ID :

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 15:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.6	.01			su		9045D	05/07/15	1
Total Solids	TSOLIDS	69.8	.0333			%		2540 G-2	05/06/15	1
Mercury	7439-97-6	U	.004	0.014	0.029	mg/kg		7471A	05/06/15	1
Aluminum	7429-90-5	430	5	7.2	14.	mg/kg		6010B	05/11/15	1
Antimony UJ MS,ICS-L	7440-36-0	U	1.1	1.4	2.9	mg/kg		6010B	05/11/15	1
Arsenic UJ ICS-L	7440-38-2	U	.93	1.4	2.9	mg/kg		6010B	05/11/15	1
Barium	7440-39-3	50.	.24	0.36	0.72	mg/kg		6010B	05/11/15	1
Beryllium	7440-41-7	U	.1	0.14	0.29	mg/kg		6010B	05/11/15	1
Cadmium UJ ICS-L	7440-43-9	U	.1	0.36	0.72	mg/kg		6010B	05/11/15	1
Chromium FJ SQL, ICS-H	7440-47-3	0.66	.2	0.72	1.4	mg/kg	J	6010B	05/11/15	1
Cobalt	7440-48-4	U	.33	0.72	1.4	mg/kg		6010B	05/11/15	1
Copper	7440-50-8	U	.76	1.4	2.9	mg/kg		6010B	05/11/15	1
Lead UJ ICS-L	7439-92-1	1.1	.27	0.36	0.72	mg/kg		6010B	05/11/15	1
Manganese J MS-L	7439-96-5	26.	.17	0.72	1.4	mg/kg		6010B	05/11/15	1
Nickel ~~J~~ UJ ICS-L	7440-02-0	U	.7	1.4	2.9	mg/kg		6010B	05/11/15	1
Selenium ~~J~~	7782-49-2	U	1.1	1.4	2.9	mg/kg		6010B	05/11/15	1
Silver	7440-22-4	U	.4	0.72	1.4	mg/kg		6010B	05/11/15	1
Thallium	7440-28-0	U	.93	1.4	2.9	mg/kg		6010B	05/11/15	1
Vanadium FJ SQL, ICS-H	7440-62-2	2.7	.34	1.4	2.9	mg/kg	J	6010B	05/11/15	1
Zinc FJ SQL, ICS-H	7440-66-6	1.6	.84	3.6	7.2	mg/kg	J	6010B	05/11/15	1
TPH (GC/FID) Low Fraction	8006-61-9	U	.69	1.6	3.2	mg/kg		8015D/GR	05/07/15	22
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	97.7				% Rec.		8015D/GR	05/07/15	1
Volatile Organics										
Acetone FJ SQL, LCS-H	67-64-1	0.036	.014	0.036	0.072	mg/kg	JJ4	8260B	05/10/15	1
Benzene F SQL-I	71-43-2	0.00086	.00039	0.00072	0.0014	mg/kg	J	8260B	05/10/15	1
Bromobenzene	108-86-1	U	.0004	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Bromochloromethane	74-97-5	U	.00056	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Bromodichloromethane	75-27-4	U	.00036	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Bromoform	75-25-2	U	.0006	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Bromomethane	74-83-9	U	.0019	0.0036	0.0072	mg/kg		8260B	05/10/15	1
n-Butylbenzene	104-51-8	U	.00037	0.00072	0.0014	mg/kg		8260B	05/10/15	1
sec-Butylbenzene F SQL-I	135-98-8	0.00060	.00029	0.00072	0.0014	mg/kg	J	8260B	05/10/15	1
tert-Butylbenzene	98-06-6	U	.0003	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Carbon Disulfide	75-15-0	0.0037	.0004	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Carbon tetrachloride	56-23-5	U	.00047	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Chlorobenzene	108-90-7	U	.0003	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Chlorodibromomethane	124-48-1	U	.00053	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Chloroethane	75-00-3	U	.0014	0.0036	0.0072	mg/kg		8260B	05/10/15	1
Chloroform	67-66-3	U	.00033	0.0036	0.0072	mg/kg		8260B	05/10/15	1

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L762679-05 (PH) - 7.6 at 20.6C

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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W03-10-N

Collected By :
Collection Date : 04/29/15 15:25

ESC Sample # : L762679-05

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloromethane	74-87-3	U	.00054	0.00072	0.0036	mg/kg		8260B	05/10/15	1
2-Chlorotoluene	95-49-8	U	.00043	0.00072	0.0014	mg/kg		8260B	05/10/15	1
4-Chlorotoluene	106-43-4	U	.00034	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	.0014	0.0036	0.0072	mg/kg		8260B	05/10/15	1
1,2-Dibromoethane	106-93-4	U	.00049	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Dibromomethane	74-95-3	U	.00054	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dichlorobenzene	95-50-1	U	.00043	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,3-Dichlorobenzene	541-73-1	U	.00034	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,4-Dichlorobenzene	106-46-7	U	.00033	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Dichlorodifluoromethane	75-71-8	U	.001	0.0036	0.0072	mg/kg		8260B	05/10/15	1
1,1-Dichloroethane	75-34-3	U	.00029	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dichloroethane	107-06-2	U	.00037	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,1-Dichloroethene	75-35-4	U	.00043	0.00072	0.0014	mg/kg		8260B	05/10/15	1
cis-1,2-Dichloroethene	156-59-2	U	.00034	0.00072	0.0014	mg/kg		8260B	05/10/15	1
trans-1,2-Dichloroethene	156-60-5	U	.00037	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dichloropropane	78-87-5	U	.00052	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,1-Dichloropropene	563-58-6	U	.00046	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,3-Dichloropropane	142-28-9	U	.0003	0.00072	0.0014	mg/kg		8260B	05/10/15	1
cis-1,3-Dichloropropene	10061-01-5	U	.00037	0.00072	0.0014	mg/kg		8260B	05/10/15	1
trans-1,3-Dichloropropene	10061-02-6	U	.00039	0.00072	0.0014	mg/kg		8260B	05/10/15	1
2,2-Dichloropropane	594-20-7	U	.0004	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Ethylbenzene	100-41-4	U	.00043	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Hexachloro-1,3-butadiene	87-68-3	U	.00049	0.00072	0.0014	mg/kg		8260B	05/10/15	1
2-Hexanone	591-78-6	U	.0054	0.0072	0.014	mg/kg		8260B	05/10/15	1
Isopropylbenzene	98-82-8	U	.00034	0.00072	0.0014	mg/kg		8260B	05/10/15	1
p-Isopropyltoluene	99-87-6	U	.00029	0.00072	0.0014	mg/kg		8260B	05/10/15	1
2-Butanone (MEK) F SQL-J	78-93-3	0.011	.0067	0.0072	0.014	mg/kg	J	8260B	05/10/15	1
Methylene Chloride	75-09-2	U	.0014	0.0036	0.0072	mg/kg		8260B	05/10/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.0027	0.0072	0.014	mg/kg		8260B	05/10/15	1
Methyl tert-butyl ether	1634-04-4	U	.0003	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Naphthalene	91-20-3	U	.0014	0.0036	0.0072	mg/kg		8260B	05/10/15	1
n-Propylbenzene	103-65-1	U	.0003	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Styrene	100-42-5	U	.00033	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	.00037	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	.00052	0.0011	0.0014	mg/kg		8260B	05/10/15	1
Tetrachloroethene	127-18-4	U	.0004	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Toluene F SQL-J	108-88-3	0.00074	.00062	0.0036	0.0072	mg/kg	J	8260B	05/10/15	1
1,2,3-Trichlorobenzene	87-61-6	U	.00044	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,2,4-Trichlorobenzene	120-82-1	U	.00056	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,1,1-Trichloroethane	71-55-6	U	.00041	0.00072	0.0014	mg/kg		8260B	05/10/15	1
1,1,2-Trichloroethane	79-00-5	U	.0004	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Trichloroethene	79-01-6	U	.0004	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Trichlorofluoromethane	75-69-4	U	.00054	0.0036	0.0072	mg/kg		8260B	05/10/15	1
1,2,3-Trichloropropane	96-18-4	U	.0011	0.0014	0.0036	mg/kg		8260B	05/10/15	1
1,2,4-Trimethylbenzene	95-63-6	U	.0003	0.00072	0.0014	mg/kg		8260B	05/10/15	1

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REPORT OF ANALYSIS

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8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W03-10-N

Collected By :
Collection Date : 04/29/15 15:25

ESC Sample # : L762679-05

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3,5-Trimethylbenzene	108-67-8	U	.00039	0.00072	0.0014	mg/kg		8260B	05/10/15	1
o-Xylene	95-47-6	U	.00049	0.00072	0.0014	mg/kg		8260B	05/10/15	1
m&p-Xylene	1330-20-7	U	.001	0.0014	0.0029	mg/kg		8260B	05/10/15	1
Vinyl chloride	75-01-4	U	.00042	0.00072	0.0014	mg/kg		8260B	05/10/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	05/10/15	1
Dibromofluoromethane	1868-53-7	105.				% Rec.		8260B	05/10/15	1
4-Bromofluorobenzene	460-00-4	97.8				% Rec.		8260B	05/10/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range FD-I		7.7	2.3	2.9	5.7	mg/kg		8015	05/07/15	1
C28-C40 Oil Range F SQL-I		5.2	.39	2.9	5.7	mg/kg	J	8015	05/07/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	67.2				% Rec.		8015	05/07/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Acenaphthene	83-32-9	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Acenaphthylene	208-96-8	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Benzo(a)anthracene	56-55-3	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Benzo(a)pyrene	50-32-8	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Benzo(b)fluoranthene	205-99-2	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Benzo(k)fluoranthene	207-08-9	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Chrysene	218-01-9	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Fluoranthene	206-44-0	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
Fluorene U MB-I	86-73-7	0.0029	0.0086 ~~.00086~~	0.0029	0.0086	mg/kg	J	8270C-SI	05/07/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
~~Naphthalene DHR~~	~~91-20-3~~	~~U~~	~~.0029~~	~~0.0086~~	~~0.029~~	~~mg/kg~~		~~8270C-SI~~	~~05/07/15~~	~~1~~
Phenanthrene F SQL-I	85-01-8	0.0014	.00086	0.0029	0.0086	mg/kg	J	8270C-SI	05/07/15	1
Pyrene	129-00-0	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/07/15	1
1-Methylnaphthalene F SQL-I	90-12-0	0.0037	.0029	0.0086	0.029	mg/kg	J	8270C-SI	05/07/15	1
2-Methylnaphthalene	91-57-6	U	.0029	0.0086	0.029	mg/kg		8270C-SI	05/07/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	81.3				% Rec.		8270C-SI	05/07/15	1
Nitrobenzene-d5	4165-60-0	92.3				% Rec.		8270C-SI	05/07/15	1
2-Fluorobiphenyl	321-60-8	81.4				% Rec.		8270C-SI	05/07/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.011	0.24	0.48	mg/kg		8270C	05/11/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.013	0.24	0.48	mg/kg		8270C	05/11/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.011	0.24	0.48	mg/kg		8270C	05/11/15	1
Benzyl Alcohol	100-51-6	U	.011	0.24	0.48	mg/kg		8270C	05/11/15	1
Carbazole	86-74-8	U	.0074	0.24	0.48	mg/kg		8270C	05/11/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

ESC Sample # : L762679-05

Site ID :

Sample ID : TU518-EX02-W03-10-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 15:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzoic acid R	~~65-85-0~~	~~U~~	~~.17~~	~~2.4~~	~~4.8~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Dibenzofuran	132-64-9	U	.0074	0.24	0.48	mg/kg		8270C	05/11/15	1
4-Bromophenyl-phenylether	101-55-3	U	.016	0.24	0.48	mg/kg		8270C	05/11/15	1
2-Chloronaphthalene	91-58-7	U	.0092	0.047	0.047	mg/kg		8270C	05/11/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.009	0.24	0.48	mg/kg		8270C	05/11/15	1
3,3-Dichlorobenzidine	91-94-1	U	.11	0.24	0.48	mg/kg		8270C	05/11/15	1
2,4-Dinitrotoluene	121-14-2	U	.0087	0.24	0.48	mg/kg		8270C	05/11/15	1
2,6-Dinitrotoluene	606-20-2	U	.011	0.24	0.48	mg/kg		8270C	05/11/15	1
Hexachlorobenzene	118-74-1	U	.012	0.24	0.48	mg/kg		8270C	05/11/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.014~~	~~0.24~~	~~0.48~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Hexachloroethane	67-72-1	U	.019	0.24	0.48	mg/kg		8270C	05/11/15	1
Isophorone	78-59-1	U	.0074	0.24	0.48	mg/kg		8270C	05/11/15	1
Nitrobenzene	98-95-3	U	.01	0.24	0.48	mg/kg		8270C	05/11/15	1
n-Nitrosodimethylamine	62-75-9	U	.093	0.24	0.48	mg/kg		8270C	05/11/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0084	0.24	0.48	mg/kg		8270C	05/11/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.013	0.24	0.48	mg/kg		8270C	05/11/15	1
Benzylbutyl phthalate	85-68-7	U	.014	0.24	0.48	mg/kg		8270C	05/11/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.017	0.24	0.48	mg/kg		8270C	05/11/15	1
Di-n-butyl phthalate	84-74-2	U	.016	0.24	0.48	mg/kg		8270C	05/11/15	1
Diethyl phthalate	84-66-2	U	.0099	0.24	0.48	mg/kg		8270C	05/11/15	1
Dimethyl phthalate	131-11-3	U	.0077	0.24	0.48	mg/kg		8270C	05/11/15	1
Di-n-octyl phthalate	117-84-0	U	.013	0.24	0.48	mg/kg		8270C	05/11/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.013~~	~~0.24~~	~~0.48~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0069	0.24	0.48	mg/kg		8270C	05/11/15	1
2-Chlorophenol	95-57-8	U	.012	0.24	0.48	mg/kg		8270C	05/11/15	1
2,4-Dichlorophenol	120-83-2	U	.011	0.24	0.48	mg/kg		8270C	05/11/15	1
2,4-Dimethylphenol	105-67-9	U	.067	0.24	0.48	mg/kg		8270C	05/11/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.17	0.24	0.48	mg/kg		8270C	05/11/15	1
2,4-Dinitrophenol	51-28-5	U	.14	0.24	0.48	mg/kg		8270C	05/11/15	1
2-Methylphenol	95-48-7	U	.014	0.24	0.48	mg/kg		8270C	05/11/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.011	0.24	0.48	mg/kg		8270C	05/11/15	1
2-Nitrophenol	88-75-5	U	.019	0.24	0.48	mg/kg		8270C	05/11/15	1
4-Nitrophenol	100-02-7	U	.074	0.24	0.48	mg/kg		8270C	05/11/15	1
4-Chloroaniline	106-47-8	U	.005	0.24	0.48	mg/kg		8270C	05/11/15	1
2-Nitroaniline	88-74-4	U	.011	0.24	0.48	mg/kg		8270C	05/11/15	1
1,2-Diphenylhydrazine	103-33-3	U	.002	0.24	0.48	mg/kg		8270C	05/11/15	1
3-Nitroaniline	99-09-2	U	.012	0.24	0.48	mg/kg		8270C	05/11/15	1
4-Nitroaniline	100-01-6	U	.0092	0.24	0.48	mg/kg		8270C	05/11/15	1
Pentachlorophenol	87-86-5	U	.069	0.24	0.48	mg/kg		8270C	05/11/15	1
Phenol	108-95-2	U	.01	0.24	0.48	mg/kg		8270C	05/11/15	1
2,4,5-Trichlorophenol	95-95-4	U	.014	0.24	0.48	mg/kg		8270C	05/11/15	1
2,4,6-Trichlorophenol	88-06-2	U	.011	0.24	0.48	mg/kg		8270C	05/11/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	78.7				% Rec.		8270C	05/11/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
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Reported: 07/01/15 16:26 Revised: 07/02/15 14:24
L762679-05 (PH) - 7.6 at 20.6C

DNR: Do Not Report

BA 8/17/15

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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W03-10-N

Collected By :
Collection Date : 04/29/15 15:25

ESC Sample # : L762679-05

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenol-d5	4165-62-2	79.5				% Rec.		8270C	05/11/15	1
Nitrobenzene-d5	4165-60-0	77.9				% Rec.		8270C	05/11/15	1
2-Fluorobiphenyl	321-60-8	77.0				% Rec.		8270C	05/11/15	1
2,4,6-Tribromophenol	118-79-6	91.0				% Rec.		8270C	05/11/15	1
p-Terphenyl-d14	1718-51-0	59.5				% Rec.		8270C	05/11/15	1

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L762679-05 (PH) - 7.6 at 20.6C

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W04-10-N

Collected By :
Collection Date : 04/29/15 15:55

ESC Sample # : L762679-06

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.8	.01			su		9045D	05/06/15	1
Total Solids	TSOLIDS	74.7	.0333			%		2540 G-2	05/06/15	1
Mercury	7439-97-6	U	.0037	0.013	0.027	mg/kg		7471A	05/06/15	1
Aluminum	7429-90-5	590	4.7	6.7	13.	mg/kg		6010B	05/11/15	1
Antimony UJ MS,ICS-L	7440-36-0	U	1	1.3	2.7	mg/kg		6010B	05/11/15	1
Arsenic UJ ICS-L	7440-38-2	U	.87	1.3	2.7	mg/kg		6010B	05/11/15	1
Barium	7440-39-3	58.	.23	0.33	0.67	mg/kg		6010B	05/11/15	1
Beryllium	7440-41-7	U	.094	0.13	0.27	mg/kg		6010B	05/11/15	1
Cadmium UJ ICS-L	7440-43-9	U	.094	0.33	0.67	mg/kg		6010B	05/11/15	1
Chromium ~~FSQL-I~~ FJ SQL,ICS-H	7440-47-3	0.78	.19	0.67	1.3	mg/kg	J	6010B	05/11/15	1
Cobalt F SQL-I	7440-48-4	0.33	.31	0.67	1.3	mg/kg	J	6010B	05/11/15	1
Copper	7440-50-8	U	.71	1.3	2.7	mg/kg		6010B	05/11/15	1
Lead J ICS-L	7439-92-1	1.0	.25	0.33	0.67	mg/kg		6010B	05/11/15	1
Manganese J MS-L	7439-96-5	27.	.16	0.67	1.3	mg/kg		6010B	05/11/15	1
Nickel UJ ICS-L	7440-02-0	U	.66	1.3	2.7	mg/kg		6010B	05/11/15	1
Selenium	7782-49-2	U	.99	1.3	2.7	mg/kg		6010B	05/11/15	1
Silver	7440-22-4	U	.37	0.67	1.3	mg/kg		6010B	05/11/15	1
Thallium	7440-28-0	U	.87	1.3	2.7	mg/kg		6010B	05/11/15	1
Vanadium J ICS-H	7440-62-2	2.9	.32	1.3	2.7	mg/kg		6010B	05/11/15	1
Zinc FJ SQL,ICS-H	7440-66-6	2.4	.79	3.3	6.7	mg/kg	J	6010B	05/11/15	1
TPH (GC/FID) Low Fraction	8006-61-9	U	.59	1.4	2.7	mg/kg		8015D/GR	05/07/15	20.5
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	98.1				% Rec.		8015D/GR	05/07/15	1
Volatile Organics										
Acetone FJ SQL,ICS-H	67-64-1	0.043	.013	0.033	0.067	mg/kg	JJ4	8260B	05/10/15	1
Benzene	71-43-2	0.0033	.00036	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Bromobenzene	108-86-1	U	.00037	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Bromochloromethane	74-97-5	U	.00052	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Bromodichloromethane	75-27-4	U	.00033	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Bromoform	75-25-2	U	.00056	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Bromomethane	74-83-9	U	.0017	0.0033	0.0067	mg/kg		8260B	05/10/15	1
n-Butylbenzene	104-51-8	U	.00035	0.00067	0.0013	mg/kg		8260B	05/10/15	1
sec-Butylbenzene	135-98-8	0.0031	.00027	0.00067	0.0013	mg/kg		8260B	05/10/15	1
tert-Butylbenzene	98-06-6	U	.00028	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Carbon Disulfide	75-15-0	0.0021	.00037	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Carbon tetrachloride	56-23-5	U	.00044	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Chlorobenzene	108-90-7	U	.00028	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Chlorodibromomethane	124-48-1	U	.0005	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Chloroethane	75-00-3	U	.0013	0.0033	0.0067	mg/kg		8260B	05/10/15	1
Chloroform	67-66-3	U	.00031	0.0033	0.0067	mg/kg		8260B	05/10/15	1

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L762679-06 (PH) - 7.8 at 21.5c

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W04-10-N

Collected By :
Collection Date : 04/29/15 15:55

ESC Sample # : L762679-06

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloromethane	74-87-3	U	.00051	0.00067	0.0033	mg/kg		8260B	05/10/15	1
2-Chlorotoluene	95-49-8	U	.0004	0.00067	0.0013	mg/kg		8260B	05/10/15	1
4-Chlorotoluene	106-43-4	U	.00032	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	.0013	0.0033	0.0067	mg/kg		8260B	05/10/15	1
1,2-Dibromoethane	106-93-4	U	.00046	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Dibromomethane	74-95-3	U	.00051	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,2-Dichlorobenzene	95-50-1	U	.0004	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,3-Dichlorobenzene	541-73-1	U	.00032	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,4-Dichlorobenzene	106-46-7	U	.00031	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Dichlorodifluoromethane	75-71-8	U	.00095	0.0033	0.0067	mg/kg		8260B	05/10/15	1
1,1-Dichloroethane	75-34-3	U	.00027	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,2-Dichloroethane	107-06-2	U	.00035	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,1-Dichloroethene	75-35-4	U	.0004	0.00067	0.0013	mg/kg		8260B	05/10/15	1
cis-1,2-Dichloroethene	156-59-2	U	.00032	0.00067	0.0013	mg/kg		8260B	05/10/15	1
trans-1,2-Dichloroethene	156-60-5	U	.00035	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,2-Dichloropropane	78-87-5	U	.00048	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,1-Dichloropropene	563-58-6	U	.00043	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,3-Dichloropropane	142-28-9	U	.00028	0.00067	0.0013	mg/kg		8260B	05/10/15	1
cis-1,3-Dichloropropene	10061-01-5	U	.00035	0.00067	0.0013	mg/kg		8260B	05/10/15	1
trans-1,3-Dichloropropene	10061-02-6	U	.00036	0.00067	0.0013	mg/kg		8260B	05/10/15	1
2,2-Dichloropropane	594-20-7	U	.00037	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Ethylbenzene F SQL-I	100-41-4	0.00041	.0004	0.00067	0.0013	mg/kg	J	8260B	05/10/15	1
Hexachloro-1,3-butadiene	87-68-3	U	.00046	0.00067	0.0013	mg/kg		8260B	05/10/15	1
2-Hexanone	591-78-6	U	.0051	0.0067	0.013	mg/kg		8260B	05/10/15	1
Isopropylbenzene F SQL-I	98-82-8	0.00064	.00032	0.00067	0.0013	mg/kg	J	8260B	05/10/15	1
p-Isopropyltoluene	99-87-6	U	.00027	0.00067	0.0013	mg/kg		8260B	05/10/15	1
2-Butanone (MEK) F SQL-I	78-93-3	0.011	.0063	0.0067	0.013	mg/kg	J	8260B	05/10/15	1
Methylene Chloride	75-09-2	U	.0013	0.0033	0.0067	mg/kg		8260B	05/10/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.0025	0.0067	0.013	mg/kg		8260B	05/10/15	1
Methyl tert-butyl ether	1634-04-4	U	.00028	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Naphthalene F SQL-I	91-20-3	0.0019	.0013	0.0033	0.0067	mg/kg	J	8260B	05/10/15	1
n-Propylbenzene	103-65-1	U	.00028	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Styrene	100-42-5	U	.00031	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	.00035	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	.00048	0.0010	0.0013	mg/kg		8260B	05/10/15	1
Tetrachloroethene	127-18-4	U	.00037	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Toluene F SQL-I	108-88-3	0.0021	.00058	0.0033	0.0067	mg/kg	J	8260B	05/10/15	1
1,2,3-Trichlorobenzene	87-61-6	U	.00041	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,2,4-Trichlorobenzene	120-82-1	U	.00052	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,1,1-Trichloroethane	71-55-6	U	.00038	0.00067	0.0013	mg/kg		8260B	05/10/15	1
1,1,2-Trichloroethane	79-00-5	U	.00037	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Trichloroethene	79-01-6	U	.00037	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Trichlorofluoromethane	75-69-4	U	.00051	0.0033	0.0067	mg/kg		8260B	05/10/15	1
1,2,3-Trichloropropane	96-18-4	U	.00099	0.0013	0.0033	mg/kg		8260B	05/10/15	1
1,2,4-Trimethylbenzene	95-63-6	U	.00028	0.00067	0.0013	mg/kg		8260B	05/10/15	1

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REPORT OF ANALYSIS

Sheri Fling
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Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W04-10-N

Collected By :
Collection Date : 04/29/15 15:55

ESC Sample # : L762679-06

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3,5-Trimethylbenzene	108-67-8	U	.00036	0.00067	0.0013	mg/kg		8260B	05/10/15	1
o-Xylene	95-47-6	U	.00046	0.00067	0.0013	mg/kg		8260B	05/10/15	1
m&p-Xylene	1330-20-7	U	.00096	0.0013	0.0027	mg/kg		8260B	05/10/15	1
Vinyl chloride	75-01-4	U	.00039	0.00067	0.0013	mg/kg		8260B	05/10/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	05/10/15	1
Dibromofluoromethane	1868-53-7	106.				% Rec.		8260B	05/10/15	1
4-Bromofluorobenzene	460-00-4	104.				% Rec.		8260B	05/10/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FO-I		190	21	27.	54.	mg/kg		8015	05/07/15	10
C28-C40 Oil Range		56.	3.6	27.	54.	mg/kg		8015	05/07/15	10
Surrogate Recovery										
o-Terphenyl	84-15-1	55.8				% Rec.		8015	05/07/15	10
Polynuclear Aromatic Hydrocarbons										
Anthracene FJ LCS-A, SQL-H	120-12-7	0.0048	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Acenaphthene F SQL-I	83-32-9	0.0056	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Acenaphthylene F SQL-I	208-96-8	0.00098	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Benzo(a)anthracene FJ LCS-A, SQL-I	56-55-3	0.0031	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Benzo(a)pyrene F SQL-I	50-32-8	0.0020	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Benzo(b)fluoranthene	205-99-2	0.0025	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Benzo(g,h,i)perylene	191-24-2	0.0012	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Benzo(k)fluoranthene	207-08-9	0.0010	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Chrysene	218-01-9	0.0024	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Dibenz(a,h)anthracene	53-70-3	U	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/07/15	1
Fluoranthene F SQL-I	206-44-0	0.0064	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Fluorene	86-73-7	0.015	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/07/15	1
Indeno(1,2,3-cd)pyrene F SQL-I	193-39-5	0.0011	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/07/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~.0027~~	~~0.0080~~	~~0.027~~	~~mg/kg~~		~~8270C-SI~~	~~05/07/15~~	~~1~~
Phenanthrene	85-01-8	0.012	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/07/15	1
Pyrene	129-00-0	0.0088	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/07/15	1
1-Methylnaphthalene F SQL-I	90-12-0	0.0056	.0027	0.0080	0.027	mg/kg	J	8270C-SI	05/07/15	1
2-Methylnaphthalene	91-57-6	U	.0027	0.0080	0.027	mg/kg		8270C-SI	05/07/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	67.0				% Rec.		8270C-SI	05/07/15	1
Nitrobenzene-d5	4165-60-0	71.8				% Rec.		8270C-SI	05/07/15	1
2-Fluorobiphenyl	321-60-8	62.8				% Rec.		8270C-SI	05/07/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.22	0.44	mg/kg		8270C	05/11/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
Benzyl Alcohol	100-51-6	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
Carbazole	86-74-8	U	.007	0.22	0.44	mg/kg		8270C	05/11/15	1

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DNR: Do Not Report

KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-06

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W04-10-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/29/15 15:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzoic acid R	~~65-85-0~~	~~U~~	~~.16~~	~~2.2~~	~~4.4~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Dibenzofuran F SQL-I	132-64-9	0.012	.007	0.22	0.44	mg/kg	J	8270C	05/11/15	1
4-Bromophenyl-phenylether	101-55-3	U	.015	0.22	0.44	mg/kg		8270C	05/11/15	1
2-Chloronaphthalene	91-58-7	U	.0086	0.044	0.044	mg/kg		8270C	05/11/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0084	0.22	0.44	mg/kg		8270C	05/11/15	1
3,3-Dichlorobenzidine	91-94-1	U	.1	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4-Dinitrotoluene	121-14-2	U	.0082	0.22	0.44	mg/kg		8270C	05/11/15	1
2,6-Dinitrotoluene	606-20-2	U	.0099	0.22	0.44	mg/kg		8270C	05/11/15	1
Hexachlorobenzene	118-74-1	U	.012	0.22	0.44	mg/kg		8270C	05/11/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.013~~	~~0.22~~	~~0.44~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Hexachloroethane	67-72-1	U	.017	0.22	0.44	mg/kg		8270C	05/11/15	1
Isophorone	78-59-1	U	.007	0.22	0.44	mg/kg		8270C	05/11/15	1
Nitrobenzene	98-95-3	U	.0094	0.22	0.44	mg/kg		8270C	05/11/15	1
n-Nitrosodimethylamine	62-75-9	U	.087	0.22	0.44	mg/kg		8270C	05/11/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0079	0.22	0.44	mg/kg		8270C	05/11/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.22	0.44	mg/kg		8270C	05/11/15	1
Benzylbutyl phthalate	85-68-7	U	.013	0.22	0.44	mg/kg		8270C	05/11/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.016	0.22	0.44	mg/kg		8270C	05/11/15	1
Di-n-butyl phthalate	84-74-2	U	.015	0.22	0.44	mg/kg		8270C	05/11/15	1
Diethyl phthalate	84-66-2	U	.0092	0.22	0.44	mg/kg		8270C	05/11/15	1
Dimethyl phthalate	131-11-3	U	.0072	0.22	0.44	mg/kg		8270C	05/11/15	1
Di-n-octyl phthalate	117-84-0	U	.012	0.22	0.44	mg/kg		8270C	05/11/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.012~~	~~0.22~~	~~0.44~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0064	0.22	0.44	mg/kg		8270C	05/11/15	1
2-Chlorophenol	95-57-8	U	.011	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4-Dichlorophenol	120-83-2	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4-Dimethylphenol	105-67-9	U	.063	0.22	0.44	mg/kg		8270C	05/11/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.16	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4-Dinitrophenol	51-28-5	U	.13	0.22	0.44	mg/kg		8270C	05/11/15	1
2-Methylphenol	95-48-7	U	.013	0.22	0.44	mg/kg		8270C	05/11/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
2-Nitrophenol	88-75-5	U	.017	0.22	0.44	mg/kg		8270C	05/11/15	1
4-Nitrophenol	100-02-7	U	.07	0.22	0.44	mg/kg		8270C	05/11/15	1
4-Chloroaniline	106-47-8	U	.0047	0.22	0.44	mg/kg		8270C	05/11/15	1
2-Nitroaniline	88-74-4	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
1,2-Diphenylhydrazine	103-33-3	U	.0019	0.22	0.44	mg/kg		8270C	05/11/15	1
3-Nitroaniline	99-09-2	U	.011	0.22	0.44	mg/kg		8270C	05/11/15	1
4-Nitroaniline	100-01-6	U	.0086	0.22	0.44	mg/kg		8270C	05/11/15	1
Pentachlorophenol	87-86-5	U	.064	0.22	0.44	mg/kg		8270C	05/11/15	1
Phenol	108-95-2	U	.0094	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4,5-Trichlorophenol	95-95-4	U	.013	0.22	0.44	mg/kg		8270C	05/11/15	1
2,4,6-Trichlorophenol	88-06-2	U	.01	0.22	0.44	mg/kg		8270C	05/11/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	71.9				% Rec.		8270C	05/11/15	1

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L762679-06 (PH) - 7.8 at 21.5c

DNR: Do Not Report

KA 8/7/15

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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W04-10-N

Collected By :
Collection Date : 04/29/15 15:55

ESC Sample # : L762679-06

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenol-d5	4165-62-2	72.7				% Rec.		8270C	05/11/15	1
Nitrobenzene-d5	4165-60-0	74.1				% Rec.		8270C	05/11/15	1
2-Fluorobiphenyl	321-60-8	70.9				% Rec.		8270C	05/11/15	1
2,4,6-Tribromophenol	118-79-6	90.3				% Rec.		8270C	05/11/15	1
p-Terphenyl-d14	1718-51-0	53.0				% Rec.		8270C	05/11/15	1

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KA 8/17/15

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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W05-10-N

Collected By :
Collection Date : 04/30/15 12:20

ESC Sample # : L762679-07

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.7	.01			su		9045D	05/06/15	1
Total Solids	TSOLIDS	73.1	.0333			%		2540 G-2	05/06/15	1
Mercury	7439-97-6	U	.0038	0.014	0.027	mg/kg		7471A	05/06/15	1
Aluminum	7429-90-5	510	4.8	6.8	14.	mg/kg		6010B	05/11/15	1
Antimony UJ MS-H ICS-H L	7440-36-0	U	1	1.4	2.7	mg/kg		6010B	05/11/15	1
Arsenic UJ ICS-L	7440-38-2	U	.89	1.4	2.7	mg/kg		6010B	05/11/15	1
Barium	7440-39-3	55.	.23	0.34	0.68	mg/kg		6010B	05/11/15	1
Beryllium	7440-41-7	U	.096	0.14	0.27	mg/kg		6010B	05/11/15	1
Cadmium UJ ICS-L	7440-43-9	U	.096	0.34	0.68	mg/kg		6010B	05/11/15	1
Chromium FJ SQL, ICS-H	7440-47-3	0.81	.19	0.68	1.4	mg/kg	J	6010B	05/11/15	1
Cobalt F SQL-I	7440-48-4	0.55	.31	0.68	1.4	mg/kg	J	6010B	05/11/15	1
Copper	7440-50-8	1.1	.72	1.4	2.7	mg/kg	J	6010B	05/11/15	1
Lead J ICS-L	7439-92-1	1.1	.26	0.34	0.68	mg/kg		6010B	05/11/15	1
Manganese J MS-L	7439-96-5	27.	.16	0.68	1.4	mg/kg		6010B	05/11/15	1
Nickel UJ ICS-L	7440-02-0	U	.67	1.4	2.7	mg/kg		6010B	05/11/15	1
Selenium FJ MS-H, SQL, ICS-H	7782-49-2	1.3	1	1.4	2.7	mg/kg	J	6010B	05/11/15	1
Silver	7440-22-4	U	.38	0.68	1.4	mg/kg		6010B	05/11/15	1
Thallium ~~F SQL-I~~ FJ SQL, ICS-H	7440-28-0	U	.89	1.4	2.7	mg/kg		6010B	05/11/15	1
Vanadium	7440-62-2	2.5	.33	1.4	2.7	mg/kg	J	6010B	05/11/15	1
Zinc ~~F SQL-I~~	7440-66-6	2.2	.81	3.4	6.8	mg/kg	J	6010B	05/11/15	1
TPH (GC/FID) Low Fraction	8006-61-9	U	.6	1.4	2.8	mg/kg		8015D/GR	05/07/15	20.5
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	97.2				% Rec.		8015D/GR	05/07/15	1
Volatile Organics										
Acetone FJ SQL, ICS-H	67-64-1	0.053	.014	0.034	0.068	mg/kg	JJ4	8260B	05/10/15	1
Benzene F SQL-I	71-43-2	0.00085	.00037	0.00068	0.0014	mg/kg	J	8260B	05/10/15	1
Bromobenzene	108-86-1	U	.00038	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Bromochloromethane	74-97-5	U	.00053	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Bromodichloromethane	75-27-4	U	.00034	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Bromoform	75-25-2	U	.00057	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Bromomethane	74-83-9	U	.0018	0.0034	0.0068	mg/kg		8260B	05/10/15	1
n-Butylbenzene	104-51-8	U	.00036	0.00068	0.0014	mg/kg		8260B	05/10/15	1
sec-Butylbenzene	135-98-8	0.0015	.00027	0.00068	0.0014	mg/kg		8260B	05/10/15	1
tert-Butylbenzene	98-06-6	U	.00029	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Carbon Disulfide	75-15-0	0.0045	.00038	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Carbon tetrachloride	56-23-5	U	.00045	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Chlorobenzene	108-90-7	U	.00029	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Chlorodibromomethane	124-48-1	U	.00051	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Chloroethane	75-00-3	U	.0013	0.0034	0.0068	mg/kg		8260B	05/10/15	1
Chloroform	67-66-3	U	.00031	0.0034	0.0068	mg/kg		8260B	05/10/15	1

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L762679-07 (PH) - 7.7 at 21.3c

KA 8/17/15

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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W05-10-N

Collected By :
Collection Date : 04/30/15 12:20

ESC Sample # : L762679-07

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloromethane	74-87-3	U	.00052	0.00068	0.0034	mg/kg		8260B	05/10/15	1
2-Chlorotoluene	95-49-8	U	.00041	0.00068	0.0014	mg/kg		8260B	05/10/15	1
4-Chlorotoluene	106-43-4	U	.00033	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	.0014	0.0034	0.0068	mg/kg		8260B	05/10/15	1
1,2-Dibromoethane	106-93-4	U	.00046	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Dibromomethane	74-95-3	U	.00052	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dichlorobenzene	95-50-1	U	.00041	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,3-Dichlorobenzene	541-73-1	U	.00033	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,4-Dichlorobenzene	106-46-7	U	.00031	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Dichlorodifluoromethane	75-71-8	U	.00097	0.0034	0.0068	mg/kg		8260B	05/10/15	1
1,1-Dichloroethane	75-34-3	U	.00027	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dichloroethane	107-06-2	U	.00036	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,1-Dichloroethene	75-35-4	U	.00041	0.00068	0.0014	mg/kg		8260B	05/10/15	1
cis-1,2-Dichloroethene	156-59-2	U	.00033	0.00068	0.0014	mg/kg		8260B	05/10/15	1
trans-1,2-Dichloroethene	156-60-5	U	.00036	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dichloropropane	78-87-5	U	.00049	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,1-Dichloropropene	563-58-6	U	.00044	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,3-Dichloropropane	142-28-9	U	.00029	0.00068	0.0014	mg/kg		8260B	05/10/15	1
cis-1,3-Dichloropropene	10061-01-5	U	.00036	0.00068	0.0014	mg/kg		8260B	05/10/15	1
trans-1,3-Dichloropropene	10061-02-6	U	.00037	0.00068	0.0014	mg/kg		8260B	05/10/15	1
2,2-Dichloropropane	594-20-7	U	.00038	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Ethylbenzene	100-41-4	U	.00041	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Hexachloro-1,3-butadiene	87-68-3	U	.00046	0.00068	0.0014	mg/kg		8260B	05/10/15	1
2-Hexanone	591-78-6	U	.0052	0.0068	0.014	mg/kg		8260B	05/10/15	1
Isopropylbenzene F SQL-I	98-82-8	0.0010	.00033	0.00068	0.0014	mg/kg	J	8260B	05/10/15	1
p-Isopropyltoluene	99-87-6	U	.00027	0.00068	0.0014	mg/kg		8260B	05/10/15	1
2-Butanone (MEK)	78-93-3	0.014	.0064	0.0068	0.014	mg/kg		8260B	05/10/15	1
Methylene Chloride	75-09-2	U	.0014	0.0034	0.0068	mg/kg		8260B	05/10/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.0026	0.0068	0.014	mg/kg		8260B	05/10/15	1
Methyl tert-butyl ether	1634-04-4	U	.00029	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Naphthalene	91-20-3	U	.0014	0.0034	0.0068	mg/kg		8260B	05/10/15	1
n-Propylbenzene	103-65-1	U	.00029	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Styrene	100-42-5	U	.00031	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	.00036	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	.00049	0.0010	0.0014	mg/kg		8260B	05/10/15	1
Tetrachloroethene	127-18-4	U	.00038	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Toluene F SQL-I	108-88-3	0.00075	.00059	0.0034	0.0068	mg/kg	J	8260B	05/10/15	1
1,2,3-Trichlorobenzene	87-61-6	U	.00042	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,2,4-Trichlorobenzene	120-82-1	U	.00053	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,1,1-Trichloroethane	71-55-6	U	.00039	0.00068	0.0014	mg/kg		8260B	05/10/15	1
1,1,2-Trichloroethane	79-00-5	U	.00038	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Trichloroethene	79-01-6	U	.00038	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Trichlorofluoromethane	75-69-4	U	.00052	0.0034	0.0068	mg/kg		8260B	05/10/15	1
1,2,3-Trichloropropane	96-18-4	U	.001	0.0014	0.0034	mg/kg		8260B	05/10/15	1
1,2,4-Trimethylbenzene	95-63-6	U	.00029	0.00068	0.0014	mg/kg		8260B	05/10/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

ESC Sample # : L762679-07

Site ID :

Sample ID : TU518-EX02-W05-10-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/30/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3,5-Trimethylbenzene	108-67-8	U	.00037	0.00068	0.0014	mg/kg		8260B	05/10/15	1
o-Xylene	95-47-6	U	.00046	0.00068	0.0014	mg/kg		8260B	05/10/15	1
m&p-Xylene	1330-20-7	U	.00098	0.0014	0.0027	mg/kg		8260B	05/10/15	1
Vinyl chloride	75-01-4	U	.0004	0.00068	0.0014	mg/kg		8260B	05/10/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	05/10/15	1
Dibromofluoromethane	1868-53-7	106.				% Rec.		8260B	05/10/15	1
4-Bromofluorobenzene	460-00-4	104.				% Rec.		8260B	05/10/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FD-I		18.	2.2	2.7	5.5	mg/kg		8015	05/08/15	1
C28-C40 Oil Range F SQL-I		1.8	.37	2.7	5.5	mg/kg	J	8015	05/08/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	53.7				% Rec.		8015	05/08/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene FJ LCS-H, SQL-H	120-12-7	0.0019	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Acenaphthene F SQL-I	83-32-9	0.0025	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Acenaphthylene	208-96-8	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(a)anthracene FJ LCS-H, SQL-H	56-55-3	0.0013	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Benzo(a)pyrene	50-32-8	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(b)fluoranthene F SQL-I	205-99-2	0.0010	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(k)fluoranthene	207-08-9	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Chrysene F SQL-I	218-01-9	0.00090	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Fluoranthene F SQL-I	206-44-0	0.0016	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Fluorene F SQL-I	86-73-7	0.0081	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~.0027~~	~~0.0082~~	~~0.027~~	~~mg/kg~~		~~8270C-SI~~	~~05/07/15~~	1
Phenanthrene F SQL-I	85-01-8	0.0082	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Pyrene	129-00-0	0.0030	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
1-Methylnaphthalene	90-12-0	0.0055	.0027	0.0082	0.027	mg/kg	J	8270C-SI	05/07/15	1
2-Methylnaphthalene	91-57-6	U	.0027	0.0082	0.027	mg/kg		8270C-SI	05/07/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	67.8				% Rec.		8270C-SI	05/07/15	1
Nitrobenzene-d5	4165-60-0	68.4				% Rec.		8270C-SI	05/07/15	1
2-Fluorobiphenyl	321-60-8	59.5				% Rec.		8270C-SI	05/07/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.23	0.46	mg/kg		8270C	05/11/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
Benzyl Alcohol	100-51-6	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
Carbazole	86-74-8	U	.0071	0.23	0.46	mg/kg		8270C	05/11/15	1

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L762679-07 (PH) - 7.7 at 21.3c

DNR: DO NOT REPORT

KA 8/17/15

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

Date Received : May 01, 2015
Description : Holloman AFB

ESC Sample # : L762679-07

Sample ID : TU518-EX02-W05-10-N

Site ID :

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/30/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzoic acid R	~~65-85-0~~	~~U~~	~~.16~~	~~2.3~~	~~4.6~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Dibenzofuran	132-64-9	U	.0071	0.23	0.46	mg/kg		8270C	05/11/15	1
4-Bromophenyl-phenylether	101-55-3	U	.015	0.23	0.46	mg/kg		8270C	05/11/15	1
2-Chloronaphthalene	91-58-7	U	.0088	0.045	0.045	mg/kg		8270C	05/11/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0086	0.23	0.46	mg/kg		8270C	05/11/15	1
3,3-Dichlorobenzidine	91-94-1	U	.11	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4-Dinitrotoluene	121-14-2	U	.0083	0.23	0.46	mg/kg		8270C	05/11/15	1
2,6-Dinitrotoluene	606-20-2	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
Hexachlorobenzene	118-74-1	U	.012	0.23	0.46	mg/kg		8270C	05/11/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.014~~	~~0.23~~	~~0.46~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Hexachloroethane	67-72-1	U	.018	0.23	0.46	mg/kg		8270C	05/11/15	1
Isophorone	78-59-1	U	.0071	0.23	0.46	mg/kg		8270C	05/11/15	1
Nitrobenzene	98-95-3	U	.0096	0.23	0.46	mg/kg		8270C	05/11/15	1
n-Nitrosodimethylamine	62-75-9	U	.089	0.23	0.46	mg/kg		8270C	05/11/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0081	0.23	0.46	mg/kg		8270C	05/11/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.23	0.46	mg/kg		8270C	05/11/15	1
Benzylbutyl phthalate	85-68-7	U	.014	0.23	0.46	mg/kg		8270C	05/11/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.016	0.23	0.46	mg/kg		8270C	05/11/15	1
Di-n-butyl phthalate	84-74-2	U	.015	0.23	0.46	mg/kg		8270C	05/11/15	1
Diethyl phthalate	84-66-2	U	.0094	0.23	0.46	mg/kg		8270C	05/11/15	1
Dimethyl phthalate	131-11-3	U	.0074	0.23	0.46	mg/kg		8270C	05/11/15	1
Di-n-octyl phthalate	117-84-0	U	.012	0.23	0.46	mg/kg		8270C	05/11/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.012~~	~~0.23~~	~~0.46~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0066	0.23	0.46	mg/kg		8270C	05/11/15	1
2-Chlorophenol	95-57-8	U	.011	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4-Dichlorophenol	120-83-2	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4-Dimethylphenol	105-67-9	U	.064	0.23	0.46	mg/kg		8270C	05/11/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.16	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4-Dinitrophenol	51-28-5	U	.13	0.23	0.46	mg/kg		8270C	05/11/15	1
2-Methylphenol	95-48-7	U	.014	0.23	0.46	mg/kg		8270C	05/11/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.011	0.23	0.46	mg/kg		8270C	05/11/15	1
2-Nitrophenol	88-75-5	U	.018	0.23	0.46	mg/kg		8270C	05/11/15	1
4-Nitrophenol	100-02-7	U	.071	0.23	0.46	mg/kg		8270C	05/11/15	1
4-Chloroaniline	106-47-8	U	.0048	0.23	0.46	mg/kg		8270C	05/11/15	1
2-Nitroaniline	88-74-4	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
1,2-Diphenylhydrazine	103-33-3	U	.0019	0.23	0.46	mg/kg		8270C	05/11/15	1
3-Nitroaniline	99-09-2	U	.012	0.23	0.46	mg/kg		8270C	05/11/15	1
4-Nitroaniline	100-01-6	U	.0088	0.23	0.46	mg/kg		8270C	05/11/15	1
Pentachlorophenol	87-86-5	U	.066	0.23	0.46	mg/kg		8270C	05/11/15	1
Phenol	108-95-2	U	.0096	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4,5-Trichlorophenol	95-95-4	U	.014	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4,6-Trichlorophenol	88-06-2	U	.011	0.23	0.46	mg/kg		8270C	05/11/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	79.6				% Rec.		8270C	05/11/15	1

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L762679-07 (PH) - 7.7 at 21.3c

DNR: Do Not Report

KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02,2015

ESC Sample # : L762679-07

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W05-10-N

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/30/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenol-d5	4165-62-2	82.2				% Rec.		8270C	05/11/15	1
Nitrobenzene-d5	4165-60-0	81.1				% Rec.		8270C	05/11/15	1
2-Fluorobiphenyl	321-60-8	74.6				% Rec.		8270C	05/11/15	1
2,4,6-Tribromophenol	118-79-6	93.9				% Rec.		8270C	05/11/15	1
p-Terphenyl-d14	1718-51-0	55.2				% Rec.		8270C	05/11/15	1

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L762679-07 (PH) - 7.7 at 21.3c

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02, 2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W05-10-D

Collected By :
Collection Date : 04/30/15 12:20

ESC Sample # : L762679-08

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.7	.01			su		9045D	05/06/15	1
Total Solids	TSOLIDS	73.0	.0333			%		2540 G-2	05/06/15	1
Mercury	7439-97-6	U	.0038	0.014	0.027	mg/kg		7471A	05/06/15	1
Aluminum	7429-90-5	520	4.8	6.9	14.	mg/kg		6010B	05/11/15	1
Antimony UJ MS,ICS-L	7440-36-0	U	1	1.4	2.7	mg/kg		6010B	05/11/15	1
Arsenic UJ ICS-L	7440-38-2	U	.89	1.4	2.7	mg/kg		6010B	05/11/15	1
Barium	7440-39-3	52.	.23	0.34	0.68	mg/kg		6010B	05/11/15	1
Beryllium	7440-41-7	U	.096	0.14	0.27	mg/kg		6010B	05/11/15	1
Cadmium UJ ICS-L	7440-43-9	U	.096	0.34	0.68	mg/kg		6010B	05/11/15	1
Chromium FJ SQL, ICS-H	7440-47-3	0.70	.19	0.69	1.4	mg/kg	J	6010B	05/11/15	1
Cobalt	7440-48-4	U	.32	0.69	1.4	mg/kg		6010B	05/11/15	1
Copper	7440-50-8	U	.73	1.4	2.7	mg/kg		6010B	05/11/15	1
Lead J ICS-L	7439-92-1	0.90	.26	0.34	0.68	mg/kg		6010B	05/11/15	1
Manganese J MS-L	7439-96-5	25.	.16	0.69	1.4	mg/kg		6010B	05/11/15	1
Nickel UJ ICS-L	7440-02-0	U	.67	1.4	2.7	mg/kg		6010B	05/11/15	1
Selenium	7782-49-2	U	1	1.4	2.7	mg/kg		6010B	05/11/15	1
Silver	7440-22-4	U	.38	0.69	1.4	mg/kg		6010B	05/11/15	1
Thallium	7440-28-0	U	.89	1.4	2.7	mg/kg		6010B	05/11/15	1
Vanadium J ICS-H	7440-62-2	2.7	.33	1.4	2.7	mg/kg		6010B	05/11/15	1
Zinc FJ SQL, ICS-H	7440-66-6	1.8	.81	3.4	6.8	mg/kg	J	6010B	05/11/15	1
TPH (GC/FID) Low Fraction	8006-61-9	U	.63	1.5	2.9	mg/kg		8015D/GR	05/07/15	21.25
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	97.9				% Rec.		8015D/GR	05/07/15	1
Volatile Organics										
Acetone FJ SQL, LCS-H	67-64-1	0.048	.014	0.034	0.068	mg/kg	JJ4	8260B	05/10/15	1
Benzene F SQL-I	71-43-2	0.00081	.00037	0.00069	0.0014	mg/kg	J	8260B	05/10/15	1
Bromobenzene	108-86-1	U	.00038	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Bromochloromethane	74-97-5	U	.00053	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Bromodichloromethane	75-27-4	U	.00034	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Bromoform	75-25-2	U	.00058	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Bromomethane	74-83-9	U	.0018	0.0034	0.0068	mg/kg		8260B	05/10/15	1
n-Butylbenzene	104-51-8	U	.00036	0.00069	0.0014	mg/kg		8260B	05/10/15	1
sec-Butylbenzene F SQL-I	135-98-8	0.00077	.00027	0.00069	0.0014	mg/kg	J	8260B	05/10/15	1
tert-Butylbenzene	98-06-6	U	.00029	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Carbon Disulfide	75-15-0	0.0025	.00038	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Carbon tetrachloride	56-23-5	U	.00045	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Chlorobenzene	108-90-7	U	.00029	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Chlorodibromomethane	124-48-1	U	.00051	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Chloroethane	75-00-3	U	.0013	0.0034	0.0068	mg/kg		8260B	05/10/15	1
Chloroform	67-66-3	U	.00032	0.0034	0.0068	mg/kg		8260B	05/10/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02, 2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-EX02-W05-10-D

Collected By :
Collection Date : 04/30/15 12:20

ESC Sample # : L762679-08

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Chloromethane	74-87-3	U	.00052	0.00069	0.0034	mg/kg		8260B	05/10/15	1
2-Chlorotoluene	95-49-8	U	.00041	0.00069	0.0014	mg/kg		8260B	05/10/15	1
4-Chlorotoluene	106-43-4	U	.00033	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	.0014	0.0034	0.0068	mg/kg		8260B	05/10/15	1
1,2-Dibromoethane	106-93-4	U	.00046	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Dibromomethane	74-95-3	U	.00052	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dichlorobenzene	95-50-1	U	.00041	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,3-Dichlorobenzene	541-73-1	U	.00033	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,4-Dichlorobenzene	106-46-7	U	.00032	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Dichlorodifluoromethane	75-71-8	U	.00097	0.0034	0.0068	mg/kg		8260B	05/10/15	1
1,1-Dichloroethane	75-34-3	U	.00027	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dichloroethane	107-06-2	U	.00036	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,1-Dichloroethene	75-35-4	U	.00041	0.00069	0.0014	mg/kg		8260B	05/10/15	1
cis-1,2-Dichloroethene	156-59-2	U	.00033	0.00069	0.0014	mg/kg		8260B	05/10/15	1
trans-1,2-Dichloroethene	156-60-5	U	.00036	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,2-Dichloropropane	78-87-5	U	.00049	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,1-Dichloropropene	563-58-6	U	.00044	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,3-Dichloropropane	142-28-9	U	.00029	0.00069	0.0014	mg/kg		8260B	05/10/15	1
cis-1,3-Dichloropropene	10061-01-5	U	.00036	0.00069	0.0014	mg/kg		8260B	05/10/15	1
trans-1,3-Dichloropropene	10061-02-6	U	.00037	0.00069	0.0014	mg/kg		8260B	05/10/15	1
2,2-Dichloropropane	594-20-7	U	.00038	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Ethylbenzene	100-41-4	U	.00041	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Hexachloro-1,3-butadiene	87-68-3	U	.00046	0.00069	0.0014	mg/kg		8260B	05/10/15	1
2-Hexanone	591-78-6	U	.0052	0.0069	0.014	mg/kg		8260B	05/10/15	1
Isopropylbenzene F SQL-I	98-82-8	0.00044	.00033	0.00069	0.0014	mg/kg	J	8260B	05/10/15	1
p-Isopropyltoluene	99-87-6	U	.00027	0.00069	0.0014	mg/kg		8260B	05/10/15	1
2-Butanone (MEK) F SQL-I	78-93-3	0.013	.0064	0.0069	0.014	mg/kg	J	8260B	05/10/15	1
Methylene Chloride	75-09-2	U	.0014	0.0034	0.0068	mg/kg		8260B	05/10/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.0026	0.0069	0.014	mg/kg		8260B	05/10/15	1
Methyl tert-butyl ether	1634-04-4	U	.00029	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Naphthalene	91-20-3	U	.0014	0.0034	0.0068	mg/kg		8260B	05/10/15	1
n-Propylbenzene	103-65-1	U	.00029	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Styrene	100-42-5	U	.00032	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	.00036	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	.00049	0.0010	0.0014	mg/kg		8260B	05/10/15	1
Tetrachloroethene	127-18-4	U	.00038	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Toluene F SQL-I	108-88-3	0.00068	.00059	0.0034	0.0068	mg/kg	J	8260B	05/10/15	1
1,2,3-Trichlorobenzene	87-61-6	U	.00042	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,2,4-Trichlorobenzene	120-82-1	U	.00053	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,1,1-Trichloroethane	71-55-6	U	.00039	0.00069	0.0014	mg/kg		8260B	05/10/15	1
1,1,2-Trichloroethane	79-00-5	U	.00038	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Trichloroethene	79-01-6	U	.00038	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Trichlorofluoromethane	75-69-4	U	.00052	0.0034	0.0068	mg/kg		8260B	05/10/15	1
1,2,3-Trichloropropane	96-18-4	U	.001	0.0014	0.0034	mg/kg		8260B	05/10/15	1
1,2,4-Trimethylbenzene	95-63-6	U	.00029	0.00069	0.0014	mg/kg		8260B	05/10/15	1

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KA 8/10/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02, 2015

ESC Sample # : L762679-08

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W05-10-D

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/30/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,3,5-Trimethylbenzene	108-67-8	U	.00037	0.00069	0.0014	mg/kg		8260B	05/10/15	1
o-Xylene	95-47-6	U	.00046	0.00069	0.0014	mg/kg		8260B	05/10/15	1
m&p-Xylene	1330-20-7	U	.00099	0.0014	0.0027	mg/kg		8260B	05/10/15	1
Vinyl chloride	75-01-4	U	.0004	0.00069	0.0014	mg/kg		8260B	05/10/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	05/10/15	1
Dibromofluoromethane	1868-53-7	107.				% Rec.		8260B	05/10/15	1
4-Bromofluorobenzene	460-00-4	99.1				% Rec.		8260B	05/10/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FO-I		44.	2.2	2.7	5.5	mg/kg		8015	05/07/15	1
C28-C40 Oil Range F SQL-I		3.0	.37	2.7	5.5	mg/kg	J	8015	05/07/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	52.9				% Rec.		8015	05/07/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene FJ LCS-H, SQL-H	120-12-7	0.0014	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Acenaphthene F SQL-I	83-32-9	0.0022	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Acenaphthylene	208-96-8	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(a)anthracene	56-55-3	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(a)pyrene	50-32-8	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(b)fluoranthene	205-99-2	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Benzo(k)fluoranthene	207-08-9	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Chrysene	218-01-9	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Fluoranthene	206-44-0	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Fluorene F SQL-I	86-73-7	0.0077	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/07/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~.0027~~	~~0.0082~~	~~0.027~~	~~mg/kg~~		~~8270C-SI~~	~~05/07/15~~	~~1~~
Phenanthrene F SQL-I	85-01-8	0.0052	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
Pyrene	129-00-0	0.0016	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/07/15	1
1-Methylnaphthalene	90-12-0	0.0040	.0027	0.0082	0.027	mg/kg	J	8270C-SI	05/07/15	1
2-Methylnaphthalene	91-57-6	U	.0027	0.0082	0.027	mg/kg		8270C-SI	05/07/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	71.8				% Rec.		8270C-SI	05/07/15	1
Nitrobenzene-d5	4165-60-0	74.5				% Rec.		8270C-SI	05/07/15	1
2-Fluorobiphenyl	321-60-8	75.8				% Rec.		8270C-SI	05/07/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.23	0.46	mg/kg		8270C	05/11/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
Benzyl Alcohol	100-51-6	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
Carbazole	86-74-8	U	.0071	0.23	0.46	mg/kg		8270C	05/11/15	1

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L762679-08 (PH) - 7.7 at 21.4c

DNR: Do Not Report

KA 8/17/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02, 2015

ESC Sample # : L762679-08

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W05-10-D

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/30/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Benzoic acid R	~~65-85-0~~	~~U~~	~~.16~~	~~2.3~~	~~4.6~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Dibenzofuran	132-64-9	U	.0071	0.23	0.46	mg/kg		8270C	05/11/15	1
4-Bromophenyl-phenylether	101-55-3	U	.015	0.23	0.46	mg/kg		8270C	05/11/15	1
2-Chloronaphthalene	91-58-7	U	.0088	0.045	0.045	mg/kg		8270C	05/11/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0086	0.23	0.46	mg/kg		8270C	05/11/15	1
3,3-Dichlorobenzidine	91-94-1	U	.11	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4-Dinitrotoluene	121-14-2	U	.0084	0.23	0.46	mg/kg		8270C	05/11/15	1
2,6-Dinitrotoluene	606-20-2	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
Hexachlorobenzene	118-74-1	U	.012	0.23	0.46	mg/kg		8270C	05/11/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.014~~	~~0.23~~	~~0.46~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Hexachloroethane	67-72-1	U	.018	0.23	0.46	mg/kg		8270C	05/11/15	1
Isophorone	78-59-1	U	.0071	0.23	0.46	mg/kg		8270C	05/11/15	1
Nitrobenzene	98-95-3	U	.0096	0.23	0.46	mg/kg		8270C	05/11/15	1
n-Nitrosodimethylamine	62-75-9	U	.089	0.23	0.46	mg/kg		8270C	05/11/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0081	0.23	0.46	mg/kg		8270C	05/11/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.23	0.46	mg/kg		8270C	05/11/15	1
Benzylbutyl phthalate	85-68-7	U	.014	0.23	0.46	mg/kg		8270C	05/11/15	1
Bis(2-ethylhexyl)phthalate F SQL-I	117-81-7	0.18	.016	0.23	0.46	mg/kg	J	8270C	05/11/15	1
Di-n-butyl phthalate	84-74-2	U	.015	0.23	0.46	mg/kg		8270C	05/11/15	1
Diethyl phthalate	84-66-2	U	.0094	0.23	0.46	mg/kg		8270C	05/11/15	1
Dimethyl phthalate	131-11-3	U	.0074	0.23	0.46	mg/kg		8270C	05/11/15	1
Di-n-octyl phthalate F SQL-I	117-84-0	0.19	.012	0.23	0.46	mg/kg	J	8270C	05/11/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.012~~	~~0.23~~	~~0.46~~	~~mg/kg~~		~~8270C~~	~~05/11/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0066	0.23	0.46	mg/kg		8270C	05/11/15	1
2-Chlorophenol	95-57-8	U	.011	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4-Dichlorophenol	120-83-2	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4-Dimethylphenol	105-67-9	U	.064	0.23	0.46	mg/kg		8270C	05/11/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.16	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4-Dinitrophenol	51-28-5	U	.13	0.23	0.46	mg/kg		8270C	05/11/15	1
2-Methylphenol	95-48-7	U	.014	0.23	0.46	mg/kg		8270C	05/11/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.011	0.23	0.46	mg/kg		8270C	05/11/15	1
2-Nitrophenol	88-75-5	U	.018	0.23	0.46	mg/kg		8270C	05/11/15	1
4-Nitrophenol	100-02-7	U	.071	0.23	0.46	mg/kg		8270C	05/11/15	1
4-Chloroaniline	106-47-8	U	.0048	0.23	0.46	mg/kg		8270C	05/11/15	1
2-Nitroaniline	88-74-4	U	.01	0.23	0.46	mg/kg		8270C	05/11/15	1
1,2-Diphenylhydrazine	103-33-3	U	.0019	0.23	0.46	mg/kg		8270C	05/11/15	1
3-Nitroaniline	99-09-2	U	.012	0.23	0.46	mg/kg		8270C	05/11/15	1
4-Nitroaniline	100-01-6	U	.0088	0.23	0.46	mg/kg		8270C	05/11/15	1
Pentachlorophenol	87-86-5	U	.066	0.23	0.46	mg/kg		8270C	05/11/15	1
Phenol	108-95-2	U	.0096	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4,5-Trichlorophenol	95-95-4	U	.014	0.23	0.46	mg/kg		8270C	05/11/15	1
2,4,6-Trichlorophenol	88-06-2	U	.011	0.23	0.46	mg/kg		8270C	05/11/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	73.8				% Rec.		8270C	05/11/15	1

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DNR: Do Not Report

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02, 2015

ESC Sample # : L762679-08

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-EX02-W05-10-D

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/30/15 12:20

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenol-d5	4165-62-2	75.2				% Rec.		8270C	05/11/15	1
Nitrobenzene-d5	4165-60-0	74.8				% Rec.		8270C	05/11/15	1
2-Fluorobiphenyl	321-60-8	66.5				% Rec.		8270C	05/11/15	1
2,4,6-Tribromophenol	118-79-6	86.1				% Rec.		8270C	05/11/15	1
p-Terphenyl-d14	1718-51-0	42.8				% Rec.		8270C	05/11/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02, 2015

Date Received : May 01, 2015
Description : Holloman AFB

ESC Sample # : L762679-09

Sample ID : TU518-FIELDBLANK01-B

Site ID :

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/30/15 13:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	31	50.	100	ug/l		8015D/G	05/04/15	1
Surrogate Recovery-%										
a,a,a-Trifluorotoluene(FID)	98-08-8	101.				% Rec.		8015D/G	05/04/15	1
Volatile Organics										
Acetone UJ CCAL-L	67-64-1	U	10	25.	50	ug/l		8260B	05/09/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	05/09/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	05/09/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	05/09/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	05/09/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	05/09/15	1
Bromomethane UJ CCAL-L	74-83-9	U	0.87	2.5	5	ug/l		8260B	05/09/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	05/09/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	05/09/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	05/09/15	1
Carbon Disulfide UJ CCAL-L	75-15-0	U	0.28	0.50	1	ug/l	J3	8260B	05/09/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	05/09/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	05/09/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	05/09/15	1
Chloroethane UJ CCAL-L	75-00-3	U	0.45	2.5	5	ug/l		8260B	05/09/15	1
Chloroform F SQL-J	67-66-3	1.8	0.32	2.5	5	ug/l	J	8260B	05/09/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l		8260B	05/09/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	05/09/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	05/09/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	05/09/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	05/09/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	05/09/15	1
1,2-Dichlorobenzene UJ CCAL-L	95-50-1	U	0.35	0.50	1	ug/l		8260B	05/09/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	05/09/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	05/09/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	05/09/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	05/09/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	05/09/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l	J4J3	8260B	05/09/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	05/09/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	05/09/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	05/09/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	05/09/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	05/09/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	05/09/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	05/09/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	05/09/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	05/09/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	05/09/15	1
Hexachloro-1,3-butadiene UJ CCAL-L	87-68-3	U	0.26	0.50	1	ug/l		8260B	05/09/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02, 2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-FIELDBLANK01-B

Collected By :
Collection Date : 04/30/15 13:10

ESC Sample # : L762679-09

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	05/09/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	05/09/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.9	5.0	10	ug/l		8260B	05/09/15	1
Methylene Chloride UJ CCAL-L	75-09-2	U	1	2.5	5	ug/l		8260B	05/09/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	05/09/15	1
Methyl tert-butyl ether UJ CCAL-L	1634-04-4	U	0.37	0.50	1	ug/l		8260B	05/09/15	1
Naphthalene UJ CCAL-L	91-20-3	U	1	2.5	5	ug/l		8260B	05/09/15	1
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	05/09/15	1
Styrene	100-42-5	U	0.31	0.50	1	ug/l		8260B	05/09/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	05/09/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	05/09/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	05/09/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	05/09/15	1
1,2,3-Trichlorobenzene UJ CCAL-L	87-61-6	U	0.23	0.50	1	ug/l		8260B	05/09/15	1
1,2,4-Trichlorobenzene UJ CCAL-L	120-82-1	U	0.36	0.50	1	ug/l		8260B	05/09/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	05/09/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	05/09/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	05/09/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l	J3	8260B	05/09/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	05/09/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	05/09/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	05/09/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	05/09/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	05/09/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	05/09/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	05/09/15	1
Dibromofluoromethane	1868-53-7	109.				% Rec.		8260B	05/09/15	1
4-Bromofluorobenzene	460-00-4	99.5				% Rec.		8260B	05/09/15	1

U = Not Detected at the LOD
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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02, 2015

Date Received : May 01, 2015
Description : Holloman AFB

Sample ID : TU518-TRIPBLANK01-B

Collected By :
Collection Date : 04/30/15 11:10

ESC Sample # : L762679-10

Site ID :

Project # : 23446543.0058AB

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	31	50.	100	ug/l		8015D/G	05/04/15	1
Surrogate Recovery-%										
a,a,a-Trifluorotoluene(FID)	98-08-8	101.				% Rec.		8015D/G	05/04/15	1
Volatile Organics										
Acetone UJ CCAL-L	67-64-1	U	10	25.	50	ug/l		8260B	05/08/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	05/08/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	05/08/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	05/08/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	05/08/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	05/08/15	1
Bromomethane UJ CCAL-L	74-83-9	U	0.87	2.5	5	ug/l		8260B	05/08/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	05/08/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	05/08/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	05/08/15	1
Carbon Disulfide UJ CCAL-L	75-15-0	U	0.28	0.50	1	ug/l	J3	8260B	05/08/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	05/08/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	05/08/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	05/08/15	1
Chloroethane UJ CCAL-L	75-00-3	U	0.45	2.5	5	ug/l		8260B	05/08/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	05/08/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l		8260B	05/08/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	05/08/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	05/08/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	05/08/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	05/08/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	05/08/15	1
1,2-Dichlorobenzene UJ CCAL-L	95-50-1	U	0.35	0.50	1	ug/l		8260B	05/08/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	05/08/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	05/08/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	05/08/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	05/08/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	05/08/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l	J4J3	8260B	05/08/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	05/08/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	05/08/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	05/08/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	05/08/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	05/08/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	05/08/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	05/08/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	05/08/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	05/08/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	05/08/15	1
Hexachloro-1,3-butadiene UJ CCAL-L	87-68-3	U	0.26	0.50	1	ug/l		8260B	05/08/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 02, 2015

ESC Sample # : L762679-10

Date Received : May 01, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU518-TRIPBLANK01-B

Project # : 23446543.0058AB

Collected By :
Collection Date : 04/30/15 11:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	05/08/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	05/08/15	1
2-Butanone (MEK) UJ CCAL-L	78-93-3	U	3.9	5.0	10	ug/l		8260B	05/08/15	1
Methylene Chloride UJ CCAL-L	75-09-2	U	1	2.5	5	ug/l		8260B	05/08/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	05/08/15	1
Methyl tert-butyl ether UJ CCAL-L	1634-04-4	U	0.37	0.50	1	ug/l		8260B	05/08/15	1
Naphthalene	91-20-3	U	1	2.5	5	ug/l		8260B	05/08/15	1
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	05/08/15	1
Styrene	100-42-5	U	0.31	0.50	1	ug/l		8260B	05/08/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	05/08/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	05/08/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	05/08/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	05/08/15	1
1,2,3-Trichlorobenzene UJ CCAL-L	87-61-6	U	0.23	0.50	1	ug/l		8260B	05/08/15	1
1,2,4-Trichlorobenzene UJ CCAL-L	120-82-1	U	0.36	0.50	1	ug/l		8260B	05/08/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	05/08/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	05/08/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	05/08/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l	J3	8260B	05/08/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	05/08/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	05/08/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	05/08/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	05/08/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	05/08/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	05/08/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	05/08/15	1
Dibromofluoromethane	1868-53-7	106.				% Rec.		8260B	05/08/15	1
4-Bromofluorobenzene	460-00-4	101.				% Rec.		8260B	05/08/15	1

U = Not Detected at the LOD
Note:
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KA 8/17/15

Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L763938
Sampling Event Dates: May 5-6, 2015
Sample-specific Parameter Review/ Laboratory Performance Parameters: Yes
Full Validation (e.g., result recalculation): No
Data Reviewer: Katie Abbott, Anna Kakai, URS Project Chemist
Date Completed: September 10, 2015
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						
				GRO	VOCs	PAHs	DRO/ORO	SVOCs	Total Metals	pH
L763938										
TU-503-EX01-W01-09-N	SA	L763938-01	Soil	----	----	X	X	X	X	X
TU-503-EX01-W02-09-N	SA	L763938-02	Soil	----	----	X	X	X	X	X
TU-503-EX01-W03-09-N	SA	L763938-03	Soil	----	----	X	X	X	X	X
TU-503-EX01-W04-09-N	SA	L763938-04	Soil	----	----	X	X	X	X	X
TU-503-EX01-F02-13-N	SA	L763938-05	Soil	----	----	X	X	X^m	X	X
TU-503-EX01-W05-09-N	SA	L763938-06	Soil	----	----	X	X	X	X	X
TU-503-EX01-W06-09-N	SA	L763938-07	Soil	----	----	X	X	X	X	X
TU-503-EX01-W07-09-N	SA	L763938-08	Soil	----	----	X	X	X	X	X
TU-503-EX01-W08-09-N	SA	L763938-09	Soil	----	----	X	X	X	X	X
TU-503-EX01-F01-12-N	SA	L763938-10	Soil	----	----	X^m	X^m	X	X^m	X

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

Analyses:
DRO/ORO - Diesel and Oil Range Organics (8015)
GRO – Gasoline Range Organics (8015D)
TDS – Total Dissolved Solids (SM2540C)
Total/ Metals – Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc, Mercury (6010B/7471A)
PAH – 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	Yes	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.
Reporting	Yes	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, and no results were changed. Therefore, no further action is necessary as a result of this validation finding. **Method 8270C Semivolatile Organic Compounds (SVOCs)** 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. A revised report was issued by the laboratory to correct the SVOC analyte list.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method Blank • Initial/Continuing Calibration Blank	Yes	Target analytes were not detected within the method or calibration blanks.
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate TU-503-EX01-F02-13-N (SVOCs) TU-503-EX01-F01-12-N (Metals, DRO, PAHs)	No	**Matrix Spike/ Matrix Spike Duplicate (MS/MSD)** The frequency of MS/MSDs met the QAPP requirement of one per twenty samples.

Review Parameter	Criteria Met?	Comment
• Laboratory Duplicate TU-503-EX01-W07-09-N (pH) TU-503-EX01-F01-12-N (Total Solids)		With the exceptions listed in Table 1, the MS/MSD recoveries and relative percent differences (RPDs) met quality control criteria. The laboratory only spiked the diesel carbon range (C10-C28); therefore, accuracy and precision with respect to the sample matrix could not be assessed for oil range organics (ORO). 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. **Laboratory Duplicate** The comparison between results of the laboratory duplicate pair met the criteria listed below. • When both the sample and duplicate values are >5x the LOQ 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 TU-503-EX01-F01-12-N (6010B Metals) • Post Digestion Spike TU-503-EX01-F01-12-N (6010B 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 exception listed in Table 2, 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 (SVOCs, PAHs, DRO/ORO)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria. The surrogate recoveries for several DRO/ORO, SVOC, and PAH samples could not be evaluated as they were diluted beyond the laboratory's ability to quantitate surrogate recoveries. Further action was not necessary.

Review Parameter	Criteria Met?	Comment
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** As VOCs and GROs were not analyzed in this data package, a trip blank was not required. Further action was not necessary. **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. A field blank was not submitted with this data package. 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 of the DRO/ORO, SVOC, and PAH results were reported as non-detect at elevated LODs. See Section 3.7 of the validation report for further discussion.
Other Parameters	NA	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	**Method 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 Polynuclear Aromatic Hydrocarbons (PAHs)** The %RSD values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **Method 8015D DRO/ORO** The relationship between instrument response and concentration was established with a blank and at least five standards for the entire carbon range of C10-C40. The %RSD over the initial calibrations curve satisfied the method requirement of <15%. Therefore, the initial calibration met method acceptance criteria. **Methods 6010B (Inductively Coupled Plasma [ICP] Metals)** 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 one standard. 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%. **Method 7471A (Mercury)** The ICALs were performed in association with the samples reported in this package. The relationship between instrument response and concentration was established with five standards. The correlation coefficient was >0.995. The calibration was verified with the analysis of an ICV standard. The analytes were recovered within the acceptance range of 90-110%. Response and linearity criteria were met and data qualification on the basis of initial calibration was not necessary.
Initial Calibration Verification/Continuing Calibration Verification	Yes	**Methods 8270C PAHs/SVOCs** The %D values for all target analytes in the calibration were less than 20%. **Method 8015D DRO/ORO** The %Ds for all target compounds in the ICVs and CCALs were less than 15%. Data qualification was not necessary. **Methods 6010B (ICP Metals) & 7471A (Mercury)** Calibration verification analyses were conducted at the proper frequency. All metals were recovered within the DOD QSM 4.2 low level acceptance range of 80-120% and the method medium/high acceptance range of 90-110%.

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 90-10% 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, 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). Table 4 summarizes the resultant data qualification on the basis of the ICS results.
Internal Standard (SVOCs/PAHs/Metals (6020))	No	All 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. With the exceptions listed in Table 4, all of the LCS recoveries and LCS/LCSD RPDs were within the laboratory determined acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method. **Method 8015 DRO/ORO** The laboratory only spiked the diesel carbon range (C10-C28); therefore, accuracy and precision with respect to the method could not be assessed for ORO.
Package Completeness	No	With the exception of benzoic acid, which was qualified as unusable due to 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
°C – Degrees Celsius
% - Percent
%Ds – Percent Differences
%RSD – Percent Relative Standard Deviation
CCALs – Continuing Calibrations
CCBs – Continuing Calibration Blanks
CCCs – Calibration Check Compounds
COC – Chain of Custody
COD – Coefficient of Determination
DLs – Detection Limits
DRO – Diesel Range Organics
GRO – Gasoline Range Organics
ICAL – Initial Calibration
ICB – Initial Calibration Blank
ICP – Inductively Coupled Plasma
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
MDL – Method Detection Limit
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
ORO – Oil Range Organics
PAHs – Polynuclear Aromatic Hydrocarbons
PDS – Post Digestion Spike
QAPP – Quality Assurance Project Plan
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
SVOCs – Semivolatile Organic Compounds
VOCs – Volatile Organic Compounds

Table 1: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
Total Metals				
TU-503-EX01-F01-12-N	Antimony	**48/42.6** (80-120)	12 (50)	As the potential bias was considered to be low, the associated antimony result for sample TU-503-EX01-F01-12-N was qualified as estimated (UJ MS-L).
SVOCs				
TU-503-EX01-F02-13-N	Benzoic Acid	**9.13/4.89** (10-110)	2 (50)	As the potential bias was considered to be low, and the MS/MSD %R was <10%, the associated benzoic acid result was qualified as unusable (R).

< – Less Than
%R – Percent Recoveries
L – Low Bias
MS/MSD – Matrix Spike Matrix Spike Duplicate
R – Unusable
RPD – Relative Percent Difference
UJ/J - Estimated
Bold indicates a recovery or RPD outside of acceptance limit

Table 2: 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					
TU-503-EX01-F01-12-N	Manganese	145.42	162.74	**12** (0-10)	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.
	Chromium	17.833	20.017	**12** (0-10)	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
L – Low Bias
Bold indicates a recovery or RPD outside of acceptance limits

Table 3: Post-Digestion Spike Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	Qualification
Total Metals			
TU-503-EX01-F01-12-N	Aluminum	**240** (75-125)	As the potential bias was considered to be high, the associated detected aluminum result was qualified as estimated (J PDS-H).

%R – Percent Recovery
PDS – Post Digestion Spike
Bold indicates a recovery or RPD outside of acceptance limit

Table 4: ICS Outliers and Resultant Data Qualification

Interferent Element	Analyte	ICS A (µg/L)	DL (µg/L)	Qualified Samples	Qualification
Calcium	Antimony	-1.97	7.5	TU-503-EX01-W01-09-N TU-503-EX01-W03-09-N TU-503-EX01-F02-13-N TU-503-EX01-W05-09-N	As the potential bias was considered to be low, the associated results were qualified as estimated (UJ/J ICS-L).
	Arsenic	-3.44	6.5		
	Cadmium	-0.22	0.7		
	Lead	2.28	1.9		As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
	Antimony	-1.97	7.5	TU-503-EX01-W02-09-N TU-503-EX01-W04-09-N TU-503-EX01-W06-09-N TU-503-EX01-W07-09-N TU-503-EX01-W08-09-N TU-503-EX01-F01-12-N	As the potential bias was considered to be low, the associated results were qualified as estimated (UJ/J ICS-L).
	Arsenic	-3.44	6.5		
	Cadmium	-0.22	0.7		
	Lead	2.28	1.9		As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
	Selenium	1.24	0.74		

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

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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

Date Received : May 08, 2015
Description : Holloman AFB

ESC Sample # : L763938-01

Site ID :

Sample ID : TU-503-EX01-W01-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:18

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.4	.01			su		9045D	05/12/15	1
Total Solids	TSOLIDS	75.8	.0333			%		2540 G-2	05/13/15	1
Mercury	7439-97-6	U	.0037	0.013	0.026	mg/kg		7471A	05/11/15	1
Aluminum	7429-90-5	4500	4.6	6.6	13.	mg/kg		6010B	05/19/15	1
Antimony UJ ICS-L, MS-L	7440-36-0	U	.99	1.3	2.6	mg/kg		6010B	05/18/15	1
Arsenic UJ ICS-L	7440-38-2	U	.86	1.3	2.6	mg/kg		6010B	05/18/15	1
Barium	7440-39-3	45.	.22	0.33	0.66	mg/kg		6010B	05/18/15	1
Beryllium F SQL-J	7440-41-7	0.13	.092	0.13	0.26	mg/kg	J	6010B	05/18/15	1
Cadmium UJ ICS-L	7440-43-9	U	.092	0.33	0.66	mg/kg		6010B	05/18/15	1
Chromium	7440-47-3	5.0	.18	0.66	1.3	mg/kg		6010B	05/18/15	1
Cobalt	7440-48-4	1.4	.3	0.66	1.3	mg/kg		6010B	05/18/15	1
Copper	7440-50-8	U	.7	1.3	2.6	mg/kg		6010B	05/18/15	1
Lead J ICS-L	7439-92-1	2.1	.25	0.33	0.66	mg/kg		6010B	05/18/15	1
Manganese J MS-L	7439-96-5	76.	.16	0.66	1.3	mg/kg		6010B	05/18/15	1
Nickel ~~J ICS-L~~	7440-02-0	2.6	.65	1.3	2.6	mg/kg		6010B	05/18/15	1
Selenium	7782-49-2	U	.98	1.3	2.6	mg/kg		6010B	05/18/15	1
Silver UJ ICS-L	7440-22-4	U	.37	0.66	1.3	mg/kg		6010B	05/18/15	1
Thallium	7440-28-0	U	.86	1.3	2.6	mg/kg		6010B	05/18/15	1
Vanadium	7440-62-2	9.8	.32	1.3	2.6	mg/kg		6010B	05/18/15	1
Zinc	7440-66-6	10.	.78	3.3	6.6	mg/kg		6010B	05/18/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FD-I		25000	210	260	530	mg/kg		8015	05/14/15	100
C28-C40 Oil Range		59.	3.6	26.	53.	mg/kg		8015	05/14/15	10
Surrogate Recovery										
o-Terphenyl	84-15-1	0.00				% Rec.	J7	8015	05/14/15	100
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	2.1	.04	0.13	0.40	mg/kg		8270C-SI	05/16/15	50
Acenaphthene	83-32-9	7.8	.04	0.13	0.40	mg/kg		8270C-SI	05/16/15	50
Acenaphthylene	208-96-8	1.4	.04	0.13	0.40	mg/kg		8270C-SI	05/16/15	50
Benzo(a)anthracene	56-55-3	0.53	.04	0.13	0.40	mg/kg		8270C-SI	05/16/15	50
Benzo(a)pyrene	50-32-8	0.26	.00079	0.0026	0.0079	mg/kg		8270C-SI	05/13/15	1
Benzo(b)fluoranthene	205-99-2	0.30	.00079	0.0026	0.0079	mg/kg		8270C-SI	05/13/15	1
Benzo(g,h,i)perylene	191-24-2	0.071	.00079	0.0026	0.0079	mg/kg		8270C-SI	05/13/15	1
Benzo(k)fluoranthene	207-08-9	0.13	.00079	0.0026	0.0079	mg/kg		8270C-SI	05/13/15	1
Chrysene F SQL-J	218-01-9	0.34	.04	0.13	0.40	mg/kg	J	8270C-SI	05/16/15	50
Dibenz(a,h)anthracene	53-70-3	0.025	.00079	0.0026	0.0079	mg/kg		8270C-SI	05/13/15	1
Fluoranthene	206-44-0	1.6	.04	0.13	0.40	mg/kg		8270C-SI	05/16/15	50
Fluorene	86-73-7	13.	.04	0.13	0.40	mg/kg		8270C-SI	05/16/15	50
Indeno(1,2,3-cd)pyrene	193-39-5	0.072	.00079	0.0026	0.0079	mg/kg		8270C-SI	05/13/15	1
Naphthalene	91-20-3	29.	.13	0.40	1.3	mg/kg		8270C-SI	05/16/15	50

Results listed are dry weight basis.
U = Not Detected at the LOD
Note:
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:09
L763938-01 (SV8270BNA) - Dilution due to matrix
L763938-01 (PH) - 7.4 at 20.5c

Ak 09/10/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-01

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W01-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:18

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenanthrene	85-01-8	24.	.04	0.13	0.40	mg/kg		8270C-SI	05/16/15	50
Pyrene	129-00-0	2.4	.04	0.13	0.40	mg/kg		8270C-SI	05/16/15	50
1-Methylnaphthalene	90-12-0	75.	.13	0.40	1.3	mg/kg		8270C-SI	05/16/15	50
2-Methylnaphthalene	91-57-6	79.	.13	0.40	1.3	mg/kg		8270C-SI	05/16/15	50
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	101.				% Rec.	J7	8270C-SI	05/16/15	50
Nitrobenzene-d5	4165-60-0	4750				% Rec.	J7	8270C-SI	05/16/15	50
2-Fluorobiphenyl	321-60-8	28.9				% Rec.	J7	8270C-SI	05/16/15	50
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.1	2.2	4.4	mg/kg		8270C	05/14/15	10
Bis(2-chloroethyl)ether	111-44-4	U	.12	2.2	4.4	mg/kg		8270C	05/14/15	10
Bis(2-chloroisopropyl)ether	39638-32-9	U	.1	2.2	4.4	mg/kg		8270C	05/14/15	10
Benzyl Alcohol	100-51-6	U	.099	2.2	4.4	mg/kg		8270C	05/14/15	10
Carbazole	86-74-8	U	.13	4.4	8.8	mg/kg		8270C	05/14/15	20
Benzoic acid AC	~~65-85-0~~	~~U~~	~~1.6~~	~~22.~~	~~44.~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~10~~
Dibenzofuran	132-64-9	U	.069	2.2	4.4	mg/kg		8270C	05/14/15	10
4-Bromophenyl-phenylether	101-55-3	U	.3	4.4	8.8	mg/kg		8270C	05/14/15	20
2-Chloronaphthalene	91-58-7	U	.084	0.22	0.44	mg/kg		8270C	05/14/15	10
4-Chlorophenyl-phenylether	7005-72-3	U	.083	2.2	4.4	mg/kg		8270C	05/14/15	10
3,3-Dichlorobenzidine	91-94-1	U	1	2.2	4.4	mg/kg		8270C	05/14/15	10
2,4-Dinitrotoluene	121-14-2	U	.08	2.2	4.4	mg/kg		8270C	05/14/15	10
2,6-Dinitrotoluene	606-20-2	U	.098	2.2	4.4	mg/kg		8270C	05/14/15	10
Hexachlorobenzene	118-74-1	U	.22	4.4	8.8	mg/kg		8270C	05/14/15	20
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.13~~	~~2.2~~	~~4.4~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~10~~
Hexachloroethane	67-72-1	U	.17	2.2	4.4	mg/kg		8270C	05/14/15	10
Isophorone	78-59-1	U	.069	2.2	4.4	mg/kg		8270C	05/14/15	10
Nitrobenzene	98-95-3	U	.092	2.2	4.4	mg/kg		8270C	05/14/15	10
n-Nitrosodimethylamine	62-75-9	U	.86	2.2	4.4	mg/kg		8270C	05/14/15	10
n-Nitrosodiphenylamine	86-30-6	U	.16	4.4	8.8	mg/kg		8270C	05/14/15	20
n-Nitrosodi-n-propylamine	621-64-7	U	.12	2.2	4.4	mg/kg		8270C	05/14/15	10
Benzylbutyl phthalate	85-68-7	U	.13	2.2	4.4	mg/kg		8270C	05/14/15	10
Bis(2-ethylhexyl)phthalate	117-81-7	U	.16	2.2	4.4	mg/kg		8270C	05/14/15	10
Di-n-butyl phthalate	84-74-2	U	.29	4.4	8.8	mg/kg		8270C	05/14/15	20
Diethyl phthalate	84-66-2	U	.091	2.2	4.4	mg/kg		8270C	05/14/15	10
Dimethyl phthalate	131-11-3	U	.071	2.2	4.4	mg/kg		8270C	05/14/15	10
Di-n-octyl phthalate	117-84-0	U	.12	2.2	4.4	mg/kg		8270C	05/14/15	10
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.12~~	~~2.2~~	~~4.4~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~10~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.063	2.2	4.4	mg/kg		8270C	05/14/15	10
2-Chlorophenol	95-57-8	U	.11	2.2	4.4	mg/kg		8270C	05/14/15	10
2,4-Dichlorophenol	120-83-2	U	.099	2.2	4.4	mg/kg		8270C	05/14/15	10
2,4-Dimethylphenol	105-67-9	U	.62	2.2	4.4	mg/kg		8270C	05/14/15	10
4,6-Dinitro-2-methylphenol	534-52-1	U	3.3	4.4	8.8	mg/kg		8270C	05/14/15	20
2,4-Dinitrophenol	51-28-5	U	1.3	2.2	4.4	mg/kg		8270C	05/14/15	10

Results listed are dry weight basis.
U = Not Detected at the LOD
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:09
L763938-01 (SV8270BNA) - Dilution due to matrix
L763938-01 (PH) - 7.4 at 20.5c

DNR = Do Not report

AK 09/10/15

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REPORT OF ANALYSIS

Sheri Fling
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July 09,2015

Date Received : May 08, 2015
Description : Holloman AFB

Sample ID : TU-503-EX01-W01-09-N

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:18

ESC Sample # : L763938-01

Site ID :

Project # : 23446543.0055AA

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2-Methylphenol	95-48-7	U	.13	2.2	4.4	mg/kg		8270C	05/14/15	10
3&4-Methyl Phenol	3&4-Methyl	U	.1	2.2	4.4	mg/kg		8270C	05/14/15	10
2-Nitrophenol	88-75-5	U	.17	2.2	4.4	mg/kg		8270C	05/14/15	10
4-Nitrophenol	100-02-7	U	.69	2.2	4.4	mg/kg		8270C	05/14/15	10
4-Chloroaniline	106-47-8	U	.046	2.2	4.4	mg/kg		8270C	05/14/15	10
2-Nitroaniline	88-74-4	U	.1	2.2	4.4	mg/kg		8270C	05/14/15	10
1,2-Diphenylhydrazine	103-33-3	U	.018	2.2	4.4	mg/kg		8270C	05/14/15	10
3-Nitroaniline	99-09-2	U	.11	2.2	4.4	mg/kg		8270C	05/14/15	10
4-Nitroaniline	100-01-6	U	.084	2.2	4.4	mg/kg		8270C	05/14/15	10
Pentachlorophenol	87-86-5	U	1.3	4.4	8.8	mg/kg		8270C	05/14/15	20
Phenol	108-95-2	U	.092	2.2	4.4	mg/kg		8270C	05/14/15	10
2,4,5-Trichlorophenol	95-95-4	U	.13	2.2	4.4	mg/kg		8270C	05/14/15	10
2,4,6-Trichlorophenol	88-06-2	U	.1	2.2	4.4	mg/kg		8270C	05/14/15	10
Surrogate Recovery										
2-Fluorophenol	367-12-4	50.0				% Rec.		8270C	05/14/15	10
Phenol-d5	4165-62-2	62.0				% Rec.		8270C	05/14/15	10
Nitrobenzene-d5	4165-60-0	178.				% Rec.	J1	8270C	05/14/15	10
2-Fluorobiphenyl	321-60-8	94.3				% Rec.		8270C	05/14/15	10
2,4,6-Tribromophenol	118-79-6	66.3				% Rec.	J7	8270C	05/14/15	20
p-Terphenyl-d14	1718-51-0	27.0				% Rec.		8270C	05/14/15	10

AK 09/10/15

Results listed are dry weight basis.
U = Not Detected at the LOD
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:09
L763938-01 (SV8270BNA) - Dilution due to matrix
L763938-01 (PH) - 7.4 at 20.5c

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-02

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W02-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.6	.01			su		9045D	05/12/15	1
Total Solids	TSOLIDS	77.6	.0333			%		2540 G-2	05/13/15	1
Mercury	7439-97-6	U	.0036	0.013	0.026	mg/kg		7471A	05/11/15	1
Aluminum	7429-90-5	4400	4.5	6.4	13.	mg/kg		6010B	05/19/15	1
Antimony U J ICS-L, MS-L	7440-36-0	U	.97	1.3	2.6	mg/kg		6010B	05/18/15	1
Arsenic U J ICS-L	7440-38-2	U	.84	1.3	2.6	mg/kg		6010B	05/18/15	1
Barium	7440-39-3	30.	.22	0.32	0.64	mg/kg		6010B	05/18/15	1
Beryllium F SQL-I	7440-41-7	0.15	.09	0.13	0.26	mg/kg	J	6010B	05/18/15	1
Cadmium U J ICS-L	7440-43-9	U	.09	0.32	0.64	mg/kg		6010B	05/18/15	1
Chromium	7440-47-3	4.4	.18	0.64	1.3	mg/kg		6010B	05/18/15	1
Cobalt	7440-48-4	1.4	.3	0.64	1.3	mg/kg		6010B	05/18/15	1
Copper ~~J ICS-H SQL-H~~ F SQL-I	7440-50-8	1.1	.68	1.3	2.6	mg/kg	J	6010B	05/18/15	1
Lead J ICS-L	7439-92-1	2.4	.24	0.32	0.64	mg/kg		6010B	05/18/15	1
Manganese J MS-L	7439-96-5	140	.15	0.64	1.3	mg/kg		6010B	05/18/15	1
Nickel ~~J ICS-L~~	7440-02-0	2.6	.63	1.3	2.6	mg/kg		6010B	05/18/15	1
Selenium ~~J ICS-H, MS-H SQL-H~~	7782-49-2	1.0	.95	1.3	2.6	mg/kg	J	6010B	05/18/15	1
Silver	7440-22-4	U	.36	0.64	1.3	mg/kg		6010B	05/18/15	1
Thallium	7440-28-0	U	.84	1.3	2.6	mg/kg		6010B	05/18/15	1
Vanadium	7440-62-2	8.4	.31	1.3	2.6	mg/kg		6010B	05/18/15	1
Zinc	7440-66-6	9.5	.76	3.2	6.4	mg/kg		6010B	05/18/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FO-I		17000	210	260	520	mg/kg		8015	05/14/15	100
C28-C40 Oil Range		100	.35	2.6	5.2	mg/kg		8015	05/14/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	0.00				% Rec.	J7	8015	05/14/15	100
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	1.4	.039	0.13	0.39	mg/kg		8270C-SI	05/16/15	50
Acenaphthene	83-32-9	1.8	.039	0.13	0.39	mg/kg		8270C-SI	05/16/15	50
Acenaphthylene	208-96-8	0.42	.039	0.13	0.39	mg/kg		8270C-SI	05/16/15	50
Benzo(a)anthracene F SQL-I	56-55-3	0.30	.039	0.13	0.39	mg/kg	J	8270C-SI	05/16/15	50
Benzo(a)pyrene	50-32-8	0.15	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Benzo(b)fluoranthene	205-99-2	0.18	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Benzo(g,h,i)perylene	191-24-2	0.045	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Benzo(k)fluoranthene	207-08-9	0.062	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Chrysene F SQL-I	218-01-9	0.21	.039	0.13	0.39	mg/kg	J	8270C-SI	05/16/15	50
Dibenz(a,h)anthracene	53-70-3	0.017	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Fluoranthene	206-44-0	0.84	.039	0.13	0.39	mg/kg		8270C-SI	05/16/15	50
Fluorene	86-73-7	3.6	.039	0.13	0.39	mg/kg		8270C-SI	05/16/15	50
Indeno(1,2,3-cd)pyrene	193-39-5	0.046	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Naphthalene DNR	~~91-20-3~~	~~3.7~~	~~.13~~	~~0.39~~	~~1.3~~	~~mg/kg~~		~~8270C-SI~~	~~05/16/15~~	~~50~~

Results listed are dry weight basis.
U = Not Detected at the LOD
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:09
L763938-02 (SV8270BNA) - Dilution due to matrix
L763938-02 (PH) - 7.6 at 20.4c

AK 09/10/15

DNR = Do Not Report

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-02

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W02-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenanthrene	85-01-8	8.2	.039	0.13	0.39	mg/kg		8270C-SI	05/16/15	50
Pyrene	129-00-0	1.0	.039	0.13	0.39	mg/kg		8270C-SI	05/16/15	50
1-Methylnaphthalene	90-12-0	15.	.13	0.39	1.3	mg/kg		8270C-SI	05/16/15	50
2-Methylnaphthalene FSQL-J	91-57-6	0.58	.13	0.39	1.3	mg/kg	J	8270C-SI	05/16/15	50
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	64.8				% Rec.	J7	8270C-SI	05/16/15	50
Nitrobenzene-d5	4165-60-0	1700				% Rec.	J7	8270C-SI	05/16/15	50
2-Fluorobiphenyl	321-60-8	63.7				% Rec.	J7	8270C-SI	05/16/15	50
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.19	4.3	8.6	mg/kg		8270C	05/14/15	20
Bis(2-chloroethyl)ether	111-44-4	U	.23	4.3	8.6	mg/kg		8270C	05/14/15	20
Bis(2-chloroisopropyl)ether	39638-32-9	U	.19	4.3	8.6	mg/kg		8270C	05/14/15	20
Benzyl Alcohol	100-51-6	U	.19	4.3	8.6	mg/kg		8270C	05/14/15	20
Carbazole	86-74-8	U	.13	4.3	8.6	mg/kg		8270C	05/14/15	20
Benzoic acid	~~65-85-0~~	~~U~~	~~3.2~~	~~43.~~	~~86.~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~20~~
Dibenzofuran	132-64-9	U	.13	4.3	8.6	mg/kg		8270C	05/14/15	20
4-Bromophenyl-phenylether	101-55-3	U	.3	4.3	8.6	mg/kg		8270C	05/14/15	20
2-Chloronaphthalene	91-58-7	U	.17	0.44	0.85	mg/kg		8270C	05/14/15	20
4-Chlorophenyl-phenylether	7005-72-3	U	.15	4.3	8.6	mg/kg		8270C	05/14/15	20
3,3-Dichlorobenzidine	91-94-1	U	2.1	4.3	8.6	mg/kg		8270C	05/14/15	20
2,4-Dinitrotoluene	121-14-2	U	.15	4.3	8.6	mg/kg		8270C	05/14/15	20
2,6-Dinitrotoluene	606-20-2	U	.19	4.3	8.6	mg/kg		8270C	05/14/15	20
Hexachlorobenzene	118-74-1	U	.22	4.3	8.6	mg/kg		8270C	05/14/15	20
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.26~~	~~4.3~~	~~8.6~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~20~~
Hexachloroethane	67-72-1	U	.35	4.3	8.6	mg/kg		8270C	05/14/15	20
Isophorone	78-59-1	U	.13	4.3	8.6	mg/kg		8270C	05/14/15	20
Nitrobenzene	98-95-3	U	.18	4.3	8.6	mg/kg		8270C	05/14/15	20
n-Nitrosodimethylamine	62-75-9	U	1.7	4.3	8.6	mg/kg		8270C	05/14/15	20
n-Nitrosodiphenylamine	86-30-6	U	.15	4.3	8.6	mg/kg		8270C	05/14/15	20
n-Nitrosodi-n-propylamine	621-64-7	U	.23	4.3	8.6	mg/kg		8270C	05/14/15	20
Benzylbutyl phthalate	85-68-7	U	.27	4.3	8.6	mg/kg		8270C	05/14/15	20
Bis(2-ethylhexyl)phthalate	117-81-7	U	.31	4.3	8.6	mg/kg		8270C	05/14/15	20
Di-n-butyl phthalate	84-74-2	U	.28	4.3	8.6	mg/kg		8270C	05/14/15	20
Diethyl phthalate	84-66-2	U	.18	4.3	8.6	mg/kg		8270C	05/14/15	20
Dimethyl phthalate	131-11-3	U	.14	4.3	8.6	mg/kg		8270C	05/14/15	20
Di-n-octyl phthalate	117-84-0	U	.23	4.3	8.6	mg/kg		8270C	05/14/15	20
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.23~~	~~4.3~~	~~8.6~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~20~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.12	4.3	8.6	mg/kg		8270C	05/14/15	20
2-Chlorophenol	95-57-8	U	.22	4.3	8.6	mg/kg		8270C	05/14/15	20
2,4-Dichlorophenol	120-83-2	U	.19	4.3	8.6	mg/kg		8270C	05/14/15	20
2,4-Dimethylphenol	105-67-9	U	1.2	4.3	8.6	mg/kg		8270C	05/14/15	20
4,6-Dinitro-2-methylphenol	534-52-1	U	3.2	4.3	8.6	mg/kg		8270C	05/14/15	20
2,4-Dinitrophenol	51-28-5	U	2.6	4.3	8.6	mg/kg		8270C	05/14/15	20

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L763938-02 (SV8270BNA) - Dilution due to matrix
L763938-02 (PH) - 7.6 at 20.4c

Akoqtolu

DNR = Do Not Report

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

Date Received : May 08, 2015
Description : Holloman AFB

ESC Sample # : L763938-02

Site ID :

Sample ID : TU-503-EX01-W02-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2-Methylphenol	95-48-7	U	.26	4.3	8.6	mg/kg		8270C	05/14/15	20
3&4-Methyl Phenol	3&4-Methyl	U	.21	4.3	8.6	mg/kg		8270C	05/14/15	20
2-Nitrophenol	88-75-5	U	.34	4.3	8.6	mg/kg		8270C	05/14/15	20
4-Nitrophenol	100-02-7	U	1.3	4.3	8.6	mg/kg		8270C	05/14/15	20
4-Chloroaniline	106-47-8	U	.09	4.3	8.6	mg/kg		8270C	05/14/15	20
2-Nitroaniline	88-74-4	U	.19	4.3	8.6	mg/kg		8270C	05/14/15	20
1,2-Diphenylhydrazine	103-33-3	U	.036	4.3	8.6	mg/kg		8270C	05/14/15	20
3-Nitroaniline	99-09-2	U	.22	4.3	8.6	mg/kg		8270C	05/14/15	20
4-Nitroaniline	100-01-6	U	.17	4.3	8.6	mg/kg		8270C	05/14/15	20
Pentachlorophenol	87-86-5	U	1.2	4.3	8.6	mg/kg		8270C	05/14/15	20
Phenol	108-95-2	U	.18	4.3	8.6	mg/kg		8270C	05/14/15	20
2,4,5-Trichlorophenol	95-95-4	U	.27	4.3	8.6	mg/kg		8270C	05/14/15	20
2,4,6-Trichlorophenol	88-06-2	U	.21	4.3	8.6	mg/kg		8270C	05/14/15	20
Surrogate Recovery										
2-Fluorophenol	367-12-4	65.0				% Rec.	J7	8270C	05/14/15	20
Phenol-d5	4165-62-2	72.8				% Rec.	J7	8270C	05/14/15	20
Nitrobenzene-d5	4165-60-0	193.				% Rec.	J7	8270C	05/14/15	20
2-Fluorobiphenyl	321-60-8	65.2				% Rec.	J7	8270C	05/14/15	20
2,4,6-Tribromophenol	118-79-6	55.7				% Rec.	J7	8270C	05/14/15	20
p-Terphenyl-d14	1718-51-0	67.8				% Rec.	J7	8270C	05/14/15	20

AK 09/10/15

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L763938-02 (SV8270BNA) - Dilution due to matrix
L763938-02 (PH) - 7.6 at 20.4c

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-03

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W03-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.5	.01			su		9045D	05/12/15	1
Total Solids	TSOLIDS	77.1	.0333			%		2540 G-2	05/13/15	1
Mercury	7439-97-6	U	.0036	0.013	0.026	mg/kg		7471A	05/11/15	1
Aluminum	7429-90-5	7600	4.5	6.5	13.	mg/kg		6010B	05/19/15	1
Antimony UJ ICS-L, MS-L	7440-36-0	U	.97	1.3	2.6	mg/kg		6010B	05/18/15	1
Arsenic UJ ICS-L	7440-38-2	U	.84	1.3	2.6	mg/kg		6010B	05/18/15	1
Barium	7440-39-3	62.	.22	0.32	0.65	mg/kg		6010B	05/18/15	1
Beryllium	7440-41-7	0.27	.091	0.13	0.26	mg/kg		6010B	05/18/15	1
Cadmium UJ ICS-L	7440-43-9	U	.091	0.32	0.65	mg/kg		6010B	05/18/15	1
Chromium	7440-47-3	8.0	.18	0.65	1.3	mg/kg		6010B	05/18/15	1
Cobalt	7440-48-4	3.0	.3	0.65	1.3	mg/kg		6010B	05/18/15	1
Copper ~~J ICS, MS, SQL-H~~ F SQL-I	7440-50-8	2.5	.69	1.3	2.6	mg/kg	J	6010B	05/18/15	1
Lead J ICS-L	7439-92-1	3.8	.25	0.32	0.65	mg/kg		6010B	05/18/15	1
Manganese J MS-L	7439-96-5	73.	.16	0.65	1.3	mg/kg		6010B	05/18/15	1
Nickel ~~J ICS-L~~	7440-02-0	5.2	.64	1.3	2.6	mg/kg		6010B	05/18/15	1
Selenium	7782-49-2	U	.96	1.3	2.6	mg/kg		6010B	05/18/15	1
Silver	7440-22-4	U	.36	0.65	1.3	mg/kg		6010B	05/18/15	1
Thallium	7440-28-0	U	.84	1.3	2.6	mg/kg		6010B	05/18/15	1
Vanadium	7440-62-2	19.	.31	1.3	2.6	mg/kg		6010B	05/18/15	1
Zinc	7440-66-6	17.	.76	3.2	6.5	mg/kg		6010B	05/18/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FD-I		2100	21	26.	52.	mg/kg		8015	05/14/15	10
C28-C40 Oil Range		10.	.35	2.6	5.2	mg/kg		8015	05/14/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	90.5				% Rec.		8015	05/14/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	0.044	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Acenaphthene	83-32-9	0.18	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Acenaphthylene	208-96-8	0.047	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Benzo(a)anthracene F SQL-I	56-55-3	0.0054	.00078	0.0026	0.0078	mg/kg	J	8270C-SI	05/13/15	1
Benzo(a)pyrene FSQL-I	50-32-8	0.0025	.00078	0.0026	0.0078	mg/kg	J	8270C-SI	05/13/15	1
Benzo(b)fluoranthene FSQL-I	205-99-2	0.0038	.00078	0.0026	0.0078	mg/kg	J	8270C-SI	05/13/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Benzo(k)fluoranthene FSQL-I	207-08-9	0.0014	.00078	0.0026	0.0078	mg/kg	J	8270C-SI	05/13/15	1
Chrysene ~~FSQL-I~~	218-01-9	0.0062	.00078	0.0026	0.0078	mg/kg	J	8270C-SI	05/13/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Fluoranthene	206-44-0	0.014	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Fluorene	86-73-7	0.34	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Naphthalene DNR	91-20-3	0.21	.0026	0.0078	0.026	mg/kg		8270C-SI	05/13/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:09
L763938-03 (PH) - 7.5 at 19.9c

AK 09/10/15

DNR = Do Not Report

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

Date Received : May 08, 2015
Description : Holloman AFB

ESC Sample # : L763938-03

Site ID :

Sample ID : TU-503-EX01-W03-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenanthrene	85-01-8	0.75	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Pyrene	129-00-0	0.034	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
1-Methylnaphthalene	90-12-0	4.0	.0026	0.0078	0.026	mg/kg		8270C-SI	05/13/15	1
2-Methylnaphthalene	91-57-6	0.093	.0026	0.0078	0.026	mg/kg		8270C-SI	05/13/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	65.0				% Rec.		8270C-SI	05/13/15	1
Nitrobenzene-d5	4165-60-0	65.6				% Rec.		8270C-SI	05/13/15	1
2-Fluorobiphenyl	321-60-8	51.4				% Rec.		8270C-SI	05/13/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.01	0.22	0.43	mg/kg		8270C	05/14/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.22	0.43	mg/kg		8270C	05/14/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.0098	0.22	0.43	mg/kg		8270C	05/14/15	1
Benzyl Alcohol	100-51-6	U	.0097	0.22	0.43	mg/kg		8270C	05/14/15	1
Carbazole	86-74-8	U	.0067	0.22	0.43	mg/kg		8270C	05/14/15	1
Benzoic acid	~~65-85-0~~	~~U~~	~~.16~~	~~2.2~~	~~4.3~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Dibenzofuran	132-64-9	U	.0067	0.22	0.43	mg/kg		8270C	05/14/15	1
4-Bromophenyl-phenylether	101-55-3	U	.014	0.22	0.43	mg/kg		8270C	05/14/15	1
2-Chloronaphthalene	91-58-7	U	.0083	0.022	0.043	mg/kg		8270C	05/14/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0082	0.22	0.43	mg/kg		8270C	05/14/15	1
3,3-Dichlorobenzidine	91-94-1	U	.1	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4-Dinitrotoluene	121-14-2	U	.0079	0.22	0.43	mg/kg		8270C	05/14/15	1
2,6-Dinitrotoluene	606-20-2	U	.0096	0.22	0.43	mg/kg		8270C	05/14/15	1
Hexachlorobenzene	118-74-1	U	.011	0.22	0.43	mg/kg		8270C	05/14/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.013~~	~~0.22~~	~~0.43~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Hexachloroethane	67-72-1	U	.017	0.22	0.43	mg/kg		8270C	05/14/15	1
Isophorone	78-59-1	U	.0067	0.22	0.43	mg/kg		8270C	05/14/15	1
Nitrobenzene	98-95-3	U	.0091	0.22	0.43	mg/kg		8270C	05/14/15	1
n-Nitrosodimethylamine	62-75-9	U	.084	0.22	0.43	mg/kg		8270C	05/14/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0076	0.22	0.43	mg/kg		8270C	05/14/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.22	0.43	mg/kg		8270C	05/14/15	1
Benzylbutyl phthalate	85-68-7	U	.013	0.22	0.43	mg/kg		8270C	05/14/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.016	0.22	0.43	mg/kg		8270C	05/14/15	1
Di-n-butyl phthalate	84-74-2	U	.014	0.22	0.43	mg/kg		8270C	05/14/15	1
Diethyl phthalate	84-66-2	U	.0089	0.22	0.43	mg/kg		8270C	05/14/15	1
Dimethyl phthalate	131-11-3	U	.007	0.22	0.43	mg/kg		8270C	05/14/15	1
Di-n-octyl phthalate	117-84-0	U	.012	0.22	0.43	mg/kg		8270C	05/14/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.011~~	~~0.22~~	~~0.43~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0062	0.22	0.43	mg/kg		8270C	05/14/15	1
2-Chlorophenol	95-57-8	U	.011	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4-Dichlorophenol	120-83-2	U	.0097	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4-Dimethylphenol	105-67-9	U	.061	0.22	0.43	mg/kg		8270C	05/14/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.16	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4-Dinitrophenol	51-28-5	U	.13	0.22	0.43	mg/kg		8270C	05/14/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
Note:

AK 09/10/15

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L763938-03 (PH) - 7.5 at 19.9c

DNR = Do Not report

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

Date Received : May 08, 2015
Description : Holloman AFB

Sample ID : TU-503-EX01-W03-09-N

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:50

ESC Sample # : L763938-03

Site ID :

Project # : 23446543.0055AA

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2-Methylphenol	95-48-7	U	.013	0.22	0.43	mg/kg		8270C	05/14/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.01	0.22	0.43	mg/kg		8270C	05/14/15	1
2-Nitrophenol	88-75-5	U	.017	0.22	0.43	mg/kg		8270C	05/14/15	1
4-Nitrophenol	100-02-7	U	.067	0.22	0.43	mg/kg		8270C	05/14/15	1
4-Chloroaniline	106-47-8	U	.0045	0.22	0.43	mg/kg		8270C	05/14/15	1
2-Nitroaniline	88-74-4	U	.0098	0.22	0.43	mg/kg		8270C	05/14/15	1
1,2-Diphenylhydrazine	103-33-3	U	.0018	0.22	0.43	mg/kg		8270C	05/14/15	1
3-Nitroaniline	99-09-2	U	.011	0.22	0.43	mg/kg		8270C	05/14/15	1
4-Nitroaniline	100-01-6	U	.0083	0.22	0.43	mg/kg		8270C	05/14/15	1
Pentachlorophenol	87-86-5	U	.062	0.22	0.43	mg/kg		8270C	05/14/15	1
Phenol	108-95-2	U	.0091	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4,5-Trichlorophenol	95-95-4	U	.013	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4,6-Trichlorophenol	88-06-2	U	.01	0.22	0.43	mg/kg		8270C	05/14/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	63.8				% Rec.		8270C	05/14/15	1
Phenol-d5	4165-62-2	61.2				% Rec.		8270C	05/14/15	1
Nitrobenzene-d5	4165-60-0	77.8				% Rec.		8270C	05/14/15	1
2-Fluorobiphenyl	321-60-8	57.1				% Rec.		8270C	05/14/15	1
2,4,6-Tribromophenol	118-79-6	74.5				% Rec.		8270C	05/14/15	1
p-Terphenyl-d14	1718-51-0	51.8				% Rec.		8270C	05/14/15	1

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L763938-03 (PH) - 7.5 at 19.9c

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-04

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W04-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 14:05

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.4	.01			su		9045D	05/12/15	1
Total Solids	TSOLIDS	75.3	.0333			%		2540 G-2	05/13/15	1
Mercury	7439-97-6	U	.0037	0.013	0.026	mg/kg		7471A	05/11/15	1
Aluminum	7429-90-5	4600	4.6	6.6	13.	mg/kg		6010B	05/19/15	1
Antimony UJ ICS-L, MS-L	7440-36-0	U	1	1.3	2.6	mg/kg		6010B	05/18/15	1
Arsenic UJ ICS-L	7440-38-2	U	.86	1.3	2.6	mg/kg		6010B	05/18/15	1
Barium	7440-39-3	34.	.22	0.33	0.66	mg/kg		6010B	05/18/15	1
Beryllium F SQL-I	7440-41-7	0.15	.093	0.13	0.26	mg/kg	J	6010B	05/18/15	1
Cadmium UJ ICS-L	7440-43-9	U	.093	0.33	0.66	mg/kg		6010B	05/18/15	1
Chromium	7440-47-3	4.4	.18	0.66	1.3	mg/kg		6010B	05/18/15	1
Cobalt	7440-48-4	1.5	.3	0.66	1.3	mg/kg		6010B	05/18/15	1
Copper ~~F1 ICS-H, SQL-H~~ F SQL-I	7440-50-8	1.0	.7	1.3	2.6	mg/kg	J	6010B	05/18/15	1
Lead J ICS-L	7439-92-1	2.0	.25	0.33	0.66	mg/kg		6010B	05/18/15	1
Manganese J MS-L	7439-96-5	62.	.16	0.66	1.3	mg/kg		6010B	05/18/15	1
Nickel ~~F1 ICS-H~~ SQL-I	7440-02-0	2.5	.65	1.3	2.6	mg/kg	J	6010B	05/18/15	1
Selenium F1 ICS-H, MS-H SQL-H	7782-49-2	1.6	.98	1.3	2.6	mg/kg	J	6010B	05/18/15	1
Silver	7440-22-4	U	.37	0.66	1.3	mg/kg		6010B	05/18/15	1
Thallium	7440-28-0	U	.86	1.3	2.6	mg/kg		6010B	05/18/15	1
Vanadium	7440-62-2	8.1	.32	1.3	2.6	mg/kg		6010B	05/18/15	1
Zinc	7440-66-6	10.	.78	3.3	6.6	mg/kg		6010B	05/18/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FD-I		36000	210	270	530	mg/kg		8015	05/14/15	100
C28-C40 Oil Range		U	36	270	530	mg/kg		8015	05/14/15	100
Surrogate Recovery										
o-Terphenyl	84-15-1	0.00				% Rec.	J7	8015	05/14/15	100
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	7.0	.08	0.27	0.80	mg/kg		8270C-SI	05/16/15	100
Acenaphthene	83-32-9	7.7	.08	0.27	0.80	mg/kg		8270C-SI	05/16/15	100
Acenaphthylene	208-96-8	1.3	.08	0.27	0.80	mg/kg		8270C-SI	05/16/15	100
Benzo(a)anthracene F SQL-I	56-55-3	0.33	.08	0.27	0.80	mg/kg	J	8270C-SI	05/16/15	100
Benzo(a)pyrene	50-32-8	0.13	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/13/15	1
Benzo(b)fluoranthene	205-99-2	0.17	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/13/15	1
Benzo(g,h,i)perylene	191-24-2	0.036	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/13/15	1
Benzo(k)fluoranthene	207-08-9	0.056	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/13/15	1
Chrysene F SQL-I	218-01-9	0.16	.08	0.27	0.80	mg/kg	J	8270C-SI	05/16/15	100
Dibenz(a,h)anthracene	53-70-3	0.012	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/13/15	1
Fluoranthene	206-44-0	0.81	.08	0.27	0.80	mg/kg		8270C-SI	05/16/15	100
Fluorene	86-73-7	11.	.08	0.27	0.80	mg/kg		8270C-SI	05/16/15	100
Indeno(1,2,3-cd)pyrene	193-39-5	0.034	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/13/15	1
Naphthalene	91-20-3	26.	.26	0.80	2.6	mg/kg		8270C-SI	05/16/15	100

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Results listed are dry weight basis.
U = Not Detected at the LOD
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:09
L763938-04 (SV8270BNA) - Dilution due to matrix
L763938-04 (PH) - 7.4 at 20.9c
L763938-04 (DRORLA) - Dilution due to matrix

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-04

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W04-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 14:05

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenanthrene	85-01-8	24.	.08	0.27	0.80	mg/kg		8270C-SI	05/16/15	100
Pyrene	129-00-0	1.7	.08	0.27	0.80	mg/kg		8270C-SI	05/16/15	100
1-Methylnaphthalene	90-12-0	62.	.26	0.80	2.6	mg/kg		8270C-SI	05/16/15	100
2-Methylnaphthalene	91-57-6	46.	.26	0.80	2.6	mg/kg		8270C-SI	05/16/15	100
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	99.4				% Rec.	J7	8270C-SI	05/16/15	100
Nitrobenzene-d5	4165-60-0	6290				% Rec.	J7	8270C-SI	05/16/15	100
2-Fluorobiphenyl	321-60-8	47.9				% Rec.	J7	8270C-SI	05/16/15	100
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.41	8.9	18.	mg/kg		8270C	05/14/15	40
Bis(2-chloroethyl)ether	111-44-4	U	.12	2.2	4.4	mg/kg		8270C	05/14/15	10
Bis(2-chloroisopropyl)ether	39638-32-9	U	.1	2.2	4.4	mg/kg		8270C	05/14/15	10
Benzyl Alcohol	100-51-6	U	.1	2.2	4.4	mg/kg		8270C	05/14/15	10
Carbazole	86-74-8	U	.069	2.2	4.4	mg/kg		8270C	05/14/15	10
Benzoic acid	~~65-85-0~~	~~U~~	~~6.5~~	~~89.~~	~~180~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~40~~
Dibenzofuran	132-64-9	U	.28	8.9	18.	mg/kg		8270C	05/14/15	40
4-Bromophenyl-phenylether	101-55-3	U	.15	2.2	4.4	mg/kg		8270C	05/14/15	10
2-Chloronaphthalene	91-58-7	U	.34	0.90	1.8	mg/kg		8270C	05/14/15	40
4-Chlorophenyl-phenylether	7005-72-3	U	.33	8.9	18.	mg/kg		8270C	05/14/15	40
3,3-Dichlorobenzidine	91-94-1	U	1	2.2	4.4	mg/kg		8270C	05/14/15	10
2,4-Dinitrotoluene	121-14-2	U	.32	8.9	18.	mg/kg		8270C	05/14/15	40
2,6-Dinitrotoluene	606-20-2	U	.38	8.9	18.	mg/kg		8270C	05/14/15	40
Hexachlorobenzene	118-74-1	U	.11	2.2	4.4	mg/kg		8270C	05/14/15	10
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.53~~	~~8.9~~	~~18.~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~40~~
Hexachloroethane	67-72-1	U	.17	2.2	4.4	mg/kg		8270C	05/14/15	10
Isophorone	78-59-1	U	.28	8.9	18.	mg/kg		8270C	05/14/15	40
Nitrobenzene	98-95-3	U	.37	8.9	18.	mg/kg		8270C	05/14/15	40
n-Nitrosodimethylamine	62-75-9	U	.86	2.2	4.4	mg/kg		8270C	05/14/15	10
n-Nitrosodiphenylamine	86-30-6	21.	.078	2.2	4.4	mg/kg		8270C	05/14/15	10
n-Nitrosodi-n-propylamine	621-64-7	U	.12	2.2	4.4	mg/kg		8270C	05/14/15	10
Benzylbutyl phthalate	85-68-7	U	.13	2.2	4.4	mg/kg		8270C	05/14/15	10
Bis(2-ethylhexyl)phthalate	117-81-7	U	.16	2.2	4.4	mg/kg		8270C	05/14/15	10
Di-n-butyl phthalate	84-74-2	U	.15	2.2	4.4	mg/kg		8270C	05/14/15	10
Diethyl phthalate	84-66-2	U	.37	8.9	18.	mg/kg		8270C	05/14/15	40
Dimethyl phthalate	131-11-3	U	.29	8.9	18.	mg/kg		8270C	05/14/15	40
Di-n-octyl phthalate	117-84-0	U	.12	2.2	4.4	mg/kg		8270C	05/14/15	10
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.46~~	~~8.9~~	~~18.~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~40~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.25	8.9	18.	mg/kg		8270C	05/14/15	40
2-Chlorophenol	95-57-8	U	.11	2.2	4.4	mg/kg		8270C	05/14/15	10
2,4-Dichlorophenol	120-83-2	U	.4	8.9	18.	mg/kg		8270C	05/14/15	40
2,4-Dimethylphenol	105-67-9	U	2.5	8.9	18.	mg/kg		8270C	05/14/15	40
4,6-Dinitro-2-methylphenol	534-52-1	U	1.6	2.2	4.4	mg/kg		8270C	05/14/15	10
2,4-Dinitrophenol	51-28-5	U	5.2	8.9	18.	mg/kg		8270C	05/14/15	40

Results listed are dry weight basis.
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:09
L763938-04 (SV8270BNA) - Dilution due to matrix
L763938-04 (PH) - 7.4 at 20.9c
L763938-04 (DRORLA) - Dilution due to matrix

AK 09/10/15

DNR = Do Not Report

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-04

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W04-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 14:05

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2-Methylphenol	95-48-7	U	.13	2.2	4.4	mg/kg		8270C	05/14/15	10
3&4-Methyl Phenol	3&4-Methyl	U	.1	2.2	4.4	mg/kg		8270C	05/14/15	10
2-Nitrophenol	88-75-5	U	.69	8.9	18.	mg/kg		8270C	05/14/15	40
4-Nitrophenol	100-02-7	U	2.8	8.9	18.	mg/kg		8270C	05/14/15	40
4-Chloroaniline	106-47-8	U	.18	8.9	18.	mg/kg		8270C	05/14/15	40
2-Nitroaniline	88-74-4	U	.4	8.9	18.	mg/kg		8270C	05/14/15	40
1,2-Diphenylhydrazine	103-33-3	U	.074	8.9	18.	mg/kg		8270C	05/14/15	40
3-Nitroaniline	99-09-2	U	.45	8.9	18.	mg/kg		8270C	05/14/15	40
4-Nitroaniline	100-01-6	U	.34	8.9	18.	mg/kg		8270C	05/14/15	40
Pentachlorophenol	87-86-5	U	.64	2.2	4.4	mg/kg		8270C	05/14/15	10
Phenol	108-95-2	U	.093	2.2	4.4	mg/kg		8270C	05/14/15	10
2,4,5-Trichlorophenol	95-95-4	U	.56	8.9	18.	mg/kg		8270C	05/14/15	40
2,4,6-Trichlorophenol	88-06-2	U	.41	8.9	18.	mg/kg		8270C	05/14/15	40
Surrogate Recovery										
2-Fluorophenol	367-12-4	49.1				% Rec.		8270C	05/14/15	10
Phenol-d5	4165-62-2	55.4				% Rec.		8270C	05/14/15	10
Nitrobenzene-d5	4165-60-0	261.				% Rec.	J7	8270C	05/14/15	40
2-Fluorobiphenyl	321-60-8	76.1				% Rec.	J7	8270C	05/14/15	40
2,4,6-Tribromophenol	118-79-6	128.				% Rec.		8270C	05/14/15	10
p-Terphenyl-d14	1718-51-0	43.2				% Rec.		8270C	05/14/15	10

AK 07/10/15

Results listed are dry weight basis.
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:09
L763938-04 (SV8270BNA) - Dilution due to matrix
L763938-04 (PH) - 7.4 at 20.9c
L763938-04 (DRORLA) - Dilution due to matrix

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-05

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-F02-13-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 16:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.6	.01			su		9045D	05/12/15	1
Total Solids	TSOLIDS	78.1	.0333			%		2540 G-2	05/13/15	1
Mercury	7439-97-6	U	.0036	0.013	0.026	mg/kg		7471A	05/11/15	1
Aluminum	7429-90-5	15000	4.5	6.4	13.	mg/kg		6010B	05/19/15	1
Antimony UJ ICS-K, MS-L	7440-36-0	U	.96	1.3	2.6	mg/kg		6010B	05/18/15	1
Arsenic J ICS-L	7440-38-2	4.5	.83	1.3	2.6	mg/kg		6010B	05/18/15	1
Barium	7440-39-3	78.	.22	0.32	0.64	mg/kg		6010B	05/18/15	1
Beryllium	7440-41-7	0.78	.09	0.13	0.26	mg/kg		6010B	05/18/15	1
Cadmium UJ ICS-L	7440-43-9	U	.09	0.32	0.64	mg/kg		6010B	05/18/15	1
Chromium	7440-47-3	17.	.18	0.64	1.3	mg/kg		6010B	05/18/15	1
Cobalt	7440-48-4	5.1	.29	0.64	1.3	mg/kg		6010B	05/18/15	1
Copper	7440-50-8	6.5	.68	1.3	2.6	mg/kg		6010B	05/18/15	1
Lead J ICS-L	7439-92-1	8.1	.24	0.32	0.64	mg/kg		6010B	05/18/15	1
Manganese J MS-L	7439-96-5	130	.15	0.64	1.3	mg/kg		6010B	05/18/15	1
Nickel	7440-02-0	13.	.63	1.3	2.6	mg/kg		6010B	05/18/15	1
Selenium	7782-49-2	U	.95	1.3	2.6	mg/kg		6010B	05/18/15	1
Silver	7440-22-4	U	.36	0.64	1.3	mg/kg		6010B	05/18/15	1
Thallium	7440-28-0	U	.83	1.3	2.6	mg/kg		6010B	05/18/15	1
Vanadium	7440-62-2	38.	.31	1.3	2.6	mg/kg		6010B	05/18/15	1
Zinc	7440-66-6	34.	.76	3.2	6.4	mg/kg		6010B	05/18/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FD-I		U	2	2.6	5.1	mg/kg		8015	05/14/15	1
C28-C40 Oil Range		U	.34	2.6	5.1	mg/kg		8015	05/14/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	65.2				% Rec.		8015	05/14/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene F S QL-I	120-12-7	0.0015	.00077	0.0026	0.0077	mg/kg	J	8270C-SI	05/13/15	1
Acenaphthene F SQL-I	83-32-9	0.0018	.00077	0.0026	0.0077	mg/kg	J	8270C-SI	05/13/15	1
Acenaphthylene	208-96-8	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Benzo(a)anthracene	56-55-3	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Benzo(a)pyrene	50-32-8	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Benzo(b)fluoranthene	205-99-2	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Benzo(k)fluoranthene	207-08-9	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Chrysene	218-01-9	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Fluoranthene	206-44-0	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Fluorene F SQL-I	86-73-7	0.0037	.00077	0.0026	0.0077	mg/kg	J	8270C-SI	05/13/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
Naphthalene	91-20-3	0.028	.0026	0.0077	0.026	mg/kg		8270C-SI	05/13/15	1

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L763938-05 (PH) - 7.6 at 20.1c

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-05

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-F02-13-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 16:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenanthrene F SQL-I	85-01-8	0.0064	.00077	0.0026	0.0077	mg/kg	J	8270C-SI	05/13/15	1
Pyrene	129-00-0	U	.00077	0.0026	0.0077	mg/kg		8270C-SI	05/13/15	1
1-Methylnaphthalene F SQL-I	90-12-0	0.019	.0026	0.0077	0.026	mg/kg	J	8270C-SI	05/13/15	1
2-Methylnaphthalene F SQL-I	91-57-6	0.011	.0026	0.0077	0.026	mg/kg	J	8270C-SI	05/13/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	57.6				% Rec.		8270C-SI	05/13/15	1
Nitrobenzene-d5	4165-60-0	75.9				% Rec.		8270C-SI	05/13/15	1
2-Fluorobiphenyl	321-60-8	64.6				% Rec.		8270C-SI	05/13/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.0098	0.21	0.43	mg/kg		8270C	05/14/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.21	0.43	mg/kg		8270C	05/14/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.0097	0.21	0.43	mg/kg		8270C	05/14/15	1
Benzyl Alcohol	100-51-6	U	.0096	0.21	0.43	mg/kg		8270C	05/14/15	1
Carbazole	86-74-8	U	.0066	0.21	0.43	mg/kg		8270C	05/14/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~.15~~	~~2.1~~	~~4.3~~	~~mg/kg~~	~~J6J3~~	~~8270C~~	~~05/14/15~~	~~1~~
Dibenzofuran	132-64-9	U	.0066	0.21	0.43	mg/kg		8270C	05/14/15	1
4-Bromophenyl-phenylether	101-55-3	U	.014	0.21	0.43	mg/kg		8270C	05/14/15	1
2-Chloronaphthalene	91-58-7	U	.0082	0.022	0.042	mg/kg		8270C	05/14/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0081	0.21	0.43	mg/kg		8270C	05/14/15	1
3,3-Dichlorobenzidine	91-94-1	U	.1	0.21	0.43	mg/kg		8270C	05/14/15	1
2,4-Dinitrotoluene	121-14-2	U	.0078	0.21	0.43	mg/kg		8270C	05/14/15	1
2,6-Dinitrotoluene	606-20-2	U	.0095	0.21	0.43	mg/kg		8270C	05/14/15	1
Hexachlorobenzene	118-74-1	U	.011	0.21	0.43	mg/kg		8270C	05/14/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.013~~	~~0.21~~	~~0.43~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Hexachloroethane	67-72-1	U	.017	0.21	0.43	mg/kg		8270C	05/14/15	1
Isophorone	78-59-1	U	.0066	0.21	0.43	mg/kg		8270C	05/14/15	1
Nitrobenzene	98-95-3	U	.009	0.21	0.43	mg/kg		8270C	05/14/15	1
n-Nitrosodimethylamine	62-75-9	U	.083	0.21	0.43	mg/kg		8270C	05/14/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0076	0.21	0.43	mg/kg		8270C	05/14/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.21	0.43	mg/kg		8270C	05/14/15	1
Benzylbutyl phthalate	85-68-7	U	.013	0.21	0.43	mg/kg		8270C	05/14/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.015	0.21	0.43	mg/kg		8270C	05/14/15	1
Di-n-butyl phthalate	84-74-2	U	.014	0.21	0.43	mg/kg		8270C	05/14/15	1
Diethyl phthalate	84-66-2	U	.0088	0.21	0.43	mg/kg		8270C	05/14/15	1
Dimethyl phthalate	131-11-3	U	.0069	0.21	0.43	mg/kg		8270C	05/14/15	1
Di-n-octyl phthalate	117-84-0	U	.012	0.21	0.43	mg/kg		8270C	05/14/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.011~~	~~0.21~~	~~0.43~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0061	0.21	0.43	mg/kg		8270C	05/14/15	1
2-Chlorophenol	95-57-8	U	.011	0.21	0.43	mg/kg		8270C	05/14/15	1
2,4-Dichlorophenol	120-83-2	U	.0096	0.21	0.43	mg/kg		8270C	05/14/15	1
2,4-Dimethylphenol	105-67-9	U	.06	0.21	0.43	mg/kg		8270C	05/14/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.15	0.21	0.43	mg/kg		8270C	05/14/15	1
2,4-Dinitrophenol	51-28-5	U	.12	0.21	0.43	mg/kg		8270C	05/14/15	1

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L763938-05 (PH) - 7.6 at 20.1c

DNR = Do Not Report

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-05

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-F02-13-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 16:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2-Methylphenol	95-48-7	U	.013	0.21	0.43	mg/kg		8270C	05/14/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.01	0.21	0.43	mg/kg		8270C	05/14/15	1
2-Nitrophenol	88-75-5	U	.017	0.21	0.43	mg/kg		8270C	05/14/15	1
4-Nitrophenol	100-02-7	U	.066	0.21	0.43	mg/kg		8270C	05/14/15	1
4-Chloroaniline	106-47-8	U	.0045	0.21	0.43	mg/kg		8270C	05/14/15	1
2-Nitroaniline	88-74-4	U	.0097	0.21	0.43	mg/kg		8270C	05/14/15	1
1,2-Diphenylhydrazine	103-33-3	U	.0018	0.21	0.43	mg/kg		8270C	05/14/15	1
3-Nitroaniline	99-09-2	U	.011	0.21	0.43	mg/kg		8270C	05/14/15	1
4-Nitroaniline	100-01-6	U	.0082	0.21	0.43	mg/kg		8270C	05/14/15	1
Pentachlorophenol	87-86-5	U	.061	0.21	0.43	mg/kg		8270C	05/14/15	1
Phenol	108-95-2	U	.009	0.21	0.43	mg/kg		8270C	05/14/15	1
2,4,5-Trichlorophenol	95-95-4	U	.013	0.21	0.43	mg/kg		8270C	05/14/15	1
2,4,6-Trichlorophenol	88-06-2	U	.01	0.21	0.43	mg/kg		8270C	05/14/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	68.2				% Rec.		8270C	05/14/15	1
Phenol-d5	4165-62-2	63.6				% Rec.		8270C	05/14/15	1
Nitrobenzene-d5	4165-60-0	72.6				% Rec.		8270C	05/14/15	1
2-Fluorobiphenyl	321-60-8	72.4				% Rec.		8270C	05/14/15	1
2,4,6-Tribromophenol	118-79-6	75.9				% Rec.		8270C	05/14/15	1
p-Terphenyl-d14	1718-51-0	59.2				% Rec.		8270C	05/14/15	1

AK 09/14/15

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-06

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W05-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.8	.01			su		9045D	05/12/15	1
Total Solids	TSOLIDS	72.9	.0333			%		2540 G-2	05/13/15	1
Mercury	7439-97-6	U	.0038	0.014	0.027	mg/kg		7471A	05/11/15	1
Aluminum	7429-90-5	8800	4.8	6.9	14.	mg/kg		6010B	05/19/15	1
Antimony UJ ICS-L, MS-L	7440-36-0	U	1	1.4	2.7	mg/kg		6010B	05/18/15	1
Arsenic UJ ICSL	7440-38-2	U	.89	1.4	2.7	mg/kg		6010B	05/18/15	1
Barium	7440-39-3	100	.23	0.34	0.68	mg/kg		6010B	05/18/15	1
Beryllium	7440-41-7	0.42	.096	0.14	0.27	mg/kg		6010B	05/18/15	1
Cadmium UJ ICS-L	7440-43-9	U	.096	0.34	0.68	mg/kg		6010B	05/18/15	1
Chromium	7440-47-3	9.3	.19	0.69	1.4	mg/kg		6010B	05/18/15	1
Cobalt	7440-48-4	2.9	.32	0.69	1.4	mg/kg		6010B	05/18/15	1
Copper ~~J ICS-H~~	7440-50-8	3.2	.73	1.4	2.7	mg/kg		6010B	05/18/15	1
Lead J ICS-L	7439-92-1	4.8	.26	0.34	0.68	mg/kg		6010B	05/18/15	1
Manganese J MS-L	7439-96-5	120	.16	0.69	1.4	mg/kg		6010B	05/18/15	1
Nickel ~~J ICS-L~~	7440-02-0	6.8	.67	1.4	2.7	mg/kg		6010B	05/18/15	1
Selenium	7782-49-2	U	1	1.4	2.7	mg/kg		6010B	05/18/15	1
Silver	7440-22-4	U	.38	0.69	1.4	mg/kg		6010B	05/18/15	1
Thallium	7440-28-0	U	.89	1.4	2.7	mg/kg		6010B	05/18/15	1
Vanadium	7440-62-2	16.	.33	1.4	2.7	mg/kg		6010B	05/18/15	1
Zinc	7440-66-6	18.	.81	3.4	6.8	mg/kg		6010B	05/18/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FD-I		220	2.2	2.7	5.5	mg/kg		8015	05/14/15	1
C28-C40 Oil Range		U	.37	2.7	5.5	mg/kg		8015	05/14/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	61.2				% Rec.		8015	05/14/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	0.015	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Acenaphthene	83-32-9	0.022	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Acenaphthylene F SQL-I	208-96-8	0.0044	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/13/15	1
Benzo(a)anthracene F SQL-I	56-55-3	0.00092	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/13/15	1
Benzo(a)pyrene	50-32-8	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Benzo(b)fluoranthene	205-99-2	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Benzo(k)fluoranthene	207-08-9	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Chrysene	218-01-9	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Fluoranthene	206-44-0	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Fluorene	86-73-7	0.027	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Naphthalene F SQL-I	91-20-3	0.0049	.0027	0.0082	0.027	mg/kg	J	8270C-SI	05/13/15	1

AK 09/10/15

Results listed are dry weight basis.
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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-06

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W05-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenanthrene	85-01-8	0.022	.00082	0.0027	0.0082	mg/kg		8270C-SI	05/13/15	1
Pyrene E SPL-I	129-00-0	0.0030	.00082	0.0027	0.0082	mg/kg	J	8270C-SI	05/13/15	1
1-Methylnaphthalene	90-12-0	0.075	.0027	0.0082	0.027	mg/kg		8270C-SI	05/13/15	1
2-Methylnaphthalene	91-57-6	U	.0027	0.0082	0.027	mg/kg		8270C-SI	05/13/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	52.5				% Rec.		8270C-SI	05/13/15	1
Nitrobenzene-d5	4165-60-0	72.3				% Rec.		8270C-SI	05/13/15	1
2-Fluorobiphenyl	321-60-8	62.8				% Rec.		8270C-SI	05/13/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.23	0.46	mg/kg		8270C	05/14/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
Benzyl Alcohol	100-51-6	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
Carbazole	86-74-8	U	.0071	0.23	0.46	mg/kg		8270C	05/14/15	1
Benzoic acid	~~65-85-0~~	~~U~~	~~.16~~	~~2.3~~	~~4.6~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Dibenzofuran	132-64-9	U	.0071	0.23	0.46	mg/kg		8270C	05/14/15	1
4-Bromophenyl-phenylether	101-55-3	U	.015	0.23	0.46	mg/kg		8270C	05/14/15	1
2-Chloronaphthalene	91-58-7	U	.0088	0.023	0.045	mg/kg		8270C	05/14/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0086	0.23	0.46	mg/kg		8270C	05/14/15	1
3,3-Dichlorobenzidine	91-94-1	U	.11	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4-Dinitrotoluene	121-14-2	U	.0084	0.23	0.46	mg/kg		8270C	05/14/15	1
2,6-Dinitrotoluene	606-20-2	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
Hexachlorobenzene	118-74-1	U	.012	0.23	0.46	mg/kg		8270C	05/14/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.014~~	~~0.23~~	~~0.46~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Hexachloroethane	67-72-1	U	.018	0.23	0.46	mg/kg		8270C	05/14/15	1
Isophorone	78-59-1	U	.0071	0.23	0.46	mg/kg		8270C	05/14/15	1
Nitrobenzene	98-95-3	U	.0096	0.23	0.46	mg/kg		8270C	05/14/15	1
n-Nitrosodimethylamine	62-75-9	U	.089	0.23	0.46	mg/kg		8270C	05/14/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0081	0.23	0.46	mg/kg		8270C	05/14/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.23	0.46	mg/kg		8270C	05/14/15	1
Benzylbutyl phthalate	85-68-7	U	.014	0.23	0.46	mg/kg		8270C	05/14/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.016	0.23	0.46	mg/kg		8270C	05/14/15	1
Di-n-butyl phthalate	84-74-2	U	.015	0.23	0.46	mg/kg		8270C	05/14/15	1
Diethyl phthalate	84-66-2	U	.0095	0.23	0.46	mg/kg		8270C	05/14/15	1
Dimethyl phthalate	131-11-3	U	.0074	0.23	0.46	mg/kg		8270C	05/14/15	1
Di-n-octyl phthalate	117-84-0	U	.012	0.23	0.46	mg/kg		8270C	05/14/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.012~~	~~0.23~~	~~0.46~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0066	0.23	0.46	mg/kg		8270C	05/14/15	1
2-Chlorophenol	95-57-8	U	.011	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4-Dichlorophenol	120-83-2	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4-Dimethylphenol	105-67-9	U	.064	0.23	0.46	mg/kg		8270C	05/14/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.16	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4-Dinitrophenol	51-28-5	U	.13	0.23	0.46	mg/kg		8270C	05/14/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

Date Received : May 08, 2015
Description : Holloman AFB

ESC Sample # : L763938-06

Site ID :

Sample ID : TU-503-EX01-W05-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2-Methylphenol	95-48-7	U	.014	0.23	0.46	mg/kg		8270C	05/14/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.011	0.23	0.46	mg/kg		8270C	05/14/15	1
2-Nitrophenol	88-75-5	U	.018	0.23	0.46	mg/kg		8270C	05/14/15	1
4-Nitrophenol	100-02-7	U	.071	0.23	0.46	mg/kg		8270C	05/14/15	1
4-Chloroaniline	106-47-8	U	.0048	0.23	0.46	mg/kg		8270C	05/14/15	1
2-Nitroaniline	88-74-4	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
1,2-Diphenylhydrazine	103-33-3	U	.0019	0.23	0.46	mg/kg		8270C	05/14/15	1
3-Nitroaniline	99-09-2	U	.012	0.23	0.46	mg/kg		8270C	05/14/15	1
4-Nitroaniline	100-01-6	U	.0088	0.23	0.46	mg/kg		8270C	05/14/15	1
Pentachlorophenol	87-86-5	U	.066	0.23	0.46	mg/kg		8270C	05/14/15	1
Phenol	108-95-2	U	.0096	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4,5-Trichlorophenol	95-95-4	U	.014	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4,6-Trichlorophenol	88-06-2	U	.011	0.23	0.46	mg/kg		8270C	05/14/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	62.8				% Rec.		8270C	05/14/15	1
Phenol-d5	4165-62-2	60.1				% Rec.		8270C	05/14/15	1
Nitrobenzene-d5	4165-60-0	67.7				% Rec.		8270C	05/14/15	1
2-Fluorobiphenyl	321-60-8	64.7				% Rec.		8270C	05/14/15	1
2,4,6-Tribromophenol	118-79-6	67.7				% Rec.		8270C	05/14/15	1
p-Terphenyl-d14	1718-51-0	52.1				% Rec.		8270C	05/14/15	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-07

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W06-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.9	.01			su		9045D	05/12/15	1
Total Solids	TSOLIDS	72.4	.0333			%		2540 G-2	05/13/15	1
Mercury	7439-97-6	U	.0039	0.014	0.028	mg/kg		7471A	05/11/15	1
Aluminum	7429-90-5	12000	4.8	6.9	14.	mg/kg		6010B	05/19/15	1
Antimony UJ ICS-L, MS-L	7440-36-0	U	1	1.4	2.8	mg/kg		6010B	05/18/15	1
Arsenic UJ ICS-L	7440-38-2	U	.9	1.4	2.8	mg/kg		6010B	05/18/15	1
Barium	7440-39-3	110	.23	0.35	0.69	mg/kg		6010B	05/18/15	1
Beryllium	7440-41-7	0.57	.097	0.14	0.28	mg/kg		6010B	05/18/15	1
Cadmium UJ ICS-L	7440-43-9	U	.097	0.35	0.69	mg/kg		6010B	05/18/15	1
Chromium	7440-47-3	12.	.19	0.69	1.4	mg/kg		6010B	05/18/15	1
Cobalt	7440-48-4	3.4	.32	0.69	1.4	mg/kg		6010B	05/18/15	1
Copper	7440-50-8	3.9	.73	1.4	2.8	mg/kg		6010B	05/18/15	1
Lead J ICS-L	7439-92-1	4.7	.26	0.35	0.69	mg/kg		6010B	05/18/15	1
Manganese J MS-L	7439-96-5	59.	.16	0.69	1.4	mg/kg		6010B	05/18/15	1
Nickel ~~J ICS-L~~	7440-02-0	8.0	.68	1.4	2.8	mg/kg		6010B	05/18/15	1
Selenium FJ ICS-~~H~~, MS-~~H~~ SQL-H	7782-49-2	1.1	1	1.4	2.8	mg/kg	J	6010B	05/18/15	1
Silver	7440-22-4	U	.39	0.69	1.4	mg/kg		6010B	05/18/15	1
Thallium	7440-28-0	U	.9	1.4	2.8	mg/kg		6010B	05/18/15	1
Vanadium	7440-62-2	21.	.33	1.4	2.8	mg/kg		6010B	05/18/15	1
Zinc	7440-66-6	22.	.81	3.5	6.9	mg/kg		6010B	05/18/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FO-I		390	2.2	2.8	5.5	mg/kg		8015	05/14/15	1
C28-C40 Oil Range		U	.37	2.8	5.5	mg/kg		8015	05/14/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	85.0				% Rec.		8015	05/14/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	0.033	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Acenaphthene	83-32-9	0.11	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Acenaphthylene	208-96-8	0.034	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Benzo(a)anthracene F S QL-I	56-55-3	0.0010	.00083	0.0028	0.0083	mg/kg	J	8270C-SI	05/13/15	1
Benzo(a)pyrene	50-32-8	U	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Benzo(b)fluoranthene	205-99-2	U	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Benzo(k)fluoranthene	207-08-9	U	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Chrysene F SQL-I	218-01-9	0.0011	.00083	0.0028	0.0083	mg/kg	J	8270C-SI	05/13/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Fluoranthene F SQL-I	206-44-0	0.0046	.00083	0.0028	0.0083	mg/kg	J	8270C-SI	05/13/15	1
Fluorene	86-73-7	0.074	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Naphthalene	91-20-3	0.061	.0028	0.0083	0.028	mg/kg		8270C-SI	05/13/15	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-07

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W06-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenanthrene	85-01-8	0.21	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
Pyrene	129-00-0	0.016	.00083	0.0028	0.0083	mg/kg		8270C-SI	05/13/15	1
1-Methylnaphthalene FSQL-I	90-12-0	0.0059	.0028	0.0083	0.028	mg/kg	J	8270C-SI	05/13/15	1
2-Methylnaphthalene FSQL-I	91-57-6	0.0070	.0028	0.0083	0.028	mg/kg	J	8270C-SI	05/13/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	70.5				% Rec.		8270C-SI	05/13/15	1
Nitrobenzene-d5	4165-60-0	72.1				% Rec.		8270C-SI	05/13/15	1
2-Fluorobiphenyl	321-60-8	55.8				% Rec.		8270C-SI	05/13/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.011	0.23	0.46	mg/kg		8270C	05/14/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.23	0.46	mg/kg		8270C	05/14/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
Benzyl Alcohol	100-51-6	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
Carbazole	86-74-8	U	.0072	0.23	0.46	mg/kg		8270C	05/14/15	1
Benzoic acid	~~65-85-0~~	~~U~~	~~.16~~	~~2.3~~	~~4.6~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	1
Dibenzofuran	132-64-9	U	.0072	0.23	0.46	mg/kg		8270C	05/14/15	1
4-Bromophenyl-phenylether	101-55-3	U	.015	0.23	0.46	mg/kg		8270C	05/14/15	1
2-Chloronaphthalene	91-58-7	U	.0088	0.023	0.046	mg/kg		8270C	05/14/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0087	0.23	0.46	mg/kg		8270C	05/14/15	1
3,3-Dichlorobenzidine	91-94-1	U	.11	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4-Dinitrotoluene	121-14-2	U	.0084	0.23	0.46	mg/kg		8270C	05/14/15	1
2,6-Dinitrotoluene	606-20-2	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
Hexachlorobenzene	118-74-1	U	.012	0.23	0.46	mg/kg		8270C	05/14/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.014~~	~~0.23~~	~~0.46~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	1
Hexachloroethane	67-72-1	U	.018	0.23	0.46	mg/kg		8270C	05/14/15	1
Isophorone	78-59-1	U	.0072	0.23	0.46	mg/kg		8270C	05/14/15	1
Nitrobenzene	98-95-3	U	.0097	0.23	0.46	mg/kg		8270C	05/14/15	1
n-Nitrosodimethylamine	62-75-9	U	.09	0.23	0.46	mg/kg		8270C	05/14/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0081	0.23	0.46	mg/kg		8270C	05/14/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.23	0.46	mg/kg		8270C	05/14/15	1
Benzylbutyl phthalate	85-68-7	U	.014	0.23	0.46	mg/kg		8270C	05/14/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.016	0.23	0.46	mg/kg		8270C	05/14/15	1
Di-n-butyl phthalate	84-74-2	U	.015	0.23	0.46	mg/kg		8270C	05/14/15	1
Diethyl phthalate	84-66-2	U	.0095	0.23	0.46	mg/kg		8270C	05/14/15	1
Dimethyl phthalate	131-11-3	U	.0074	0.23	0.46	mg/kg		8270C	05/14/15	1
Di-n-octyl phthalate	117-84-0	U	.012	0.23	0.46	mg/kg		8270C	05/14/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.012~~	~~0.23~~	~~0.46~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0066	0.23	0.46	mg/kg		8270C	05/14/15	1
2-Chlorophenol	95-57-8	U	.011	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4-Dichlorophenol	120-83-2	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4-Dimethylphenol	105-67-9	U	.065	0.23	0.46	mg/kg		8270C	05/14/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.16	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4-Dinitrophenol	51-28-5	U	.14	0.23	0.46	mg/kg		8270C	05/14/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:10
L763938-07 (PH) - 7.9 at 20.0c

AK 09/10/15

DNR = Do Not Report

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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-07

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W06-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2-Methylphenol	95-48-7	U	.014	0.23	0.46	mg/kg		8270C	05/14/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.011	0.23	0.46	mg/kg		8270C	05/14/15	1
2-Nitrophenol	88-75-5	U	.018	0.23	0.46	mg/kg		8270C	05/14/15	1
4-Nitrophenol	100-02-7	U	.072	0.23	0.46	mg/kg		8270C	05/14/15	1
4-Chloroaniline	106-47-8	U	.0048	0.23	0.46	mg/kg		8270C	05/14/15	1
2-Nitroaniline	88-74-4	U	.01	0.23	0.46	mg/kg		8270C	05/14/15	1
1,2-Diphenylhydrazine	103-33-3	U	.0019	0.23	0.46	mg/kg		8270C	05/14/15	1
3-Nitroaniline	99-09-2	U	.012	0.23	0.46	mg/kg		8270C	05/14/15	1
4-Nitroaniline	100-01-6	U	.0088	0.23	0.46	mg/kg		8270C	05/14/15	1
Pentachlorophenol	87-86-5	U	.066	0.23	0.46	mg/kg		8270C	05/14/15	1
Phenol	108-95-2	U	.0097	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4,5-Trichlorophenol	95-95-4	U	.014	0.23	0.46	mg/kg		8270C	05/14/15	1
2,4,6-Trichlorophenol	88-06-2	U	.011	0.23	0.46	mg/kg		8270C	05/14/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	57.9				% Rec.		8270C	05/14/15	1
Phenol-d5	4165-62-2	57.3				% Rec.		8270C	05/14/15	1
Nitrobenzene-d5	4165-60-0	66.3				% Rec.		8270C	05/14/15	1
2-Fluorobiphenyl	321-60-8	53.9				% Rec.		8270C	05/14/15	1
2,4,6-Tribromophenol	118-79-6	63.4				% Rec.		8270C	05/14/15	1
p-Terphenyl-d14	1718-51-0	48.3				% Rec.		8270C	05/14/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:10
L763938-07 (PH) - 7.9 at 20.0c

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

Date Received : May 08, 2015
Description : Holloman AFB

ESC Sample # : L763938-08

Site ID :

Sample ID : TU-503-EX01-W07-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.7	.01			su		9045D	05/12/15	1
Total Solids	TSOLIDS	75.2	.0333			%		2540 G-2	05/13/15	1
Mercury	7439-97-6	U	.0037	0.013	0.026	mg/kg		7471A	05/11/15	1
Aluminum	7429-90-5	4400	4.6	6.6	13.	mg/kg		6010B	05/19/15	1
Antimony UJ ICS-L, MS-L	7440-36-0	U	1	1.3	2.6	mg/kg		6010B	05/18/15	1
Arsenic UJ ICS-L	7440-38-2	U	.86	1.3	2.6	mg/kg		6010B	05/18/15	1
Barium	7440-39-3	34.	.23	0.33	0.66	mg/kg		6010B	05/18/15	1
Beryllium F SQL-I	7440-41-7	0.15	.093	0.13	0.26	mg/kg	J	6010B	05/18/15	1
Cadmium UJ ICS-L	7440-43-9	U	.093	0.33	0.66	mg/kg		6010B	05/18/15	1
Chromium	7440-47-3	4.1	.19	0.66	1.3	mg/kg		6010B	05/18/15	1
Cobalt	7440-48-4	1.5	.3	0.66	1.3	mg/kg		6010B	05/18/15	1
Copper ~~J ICS-H~~, SQL-H I	7440-50-8	2.0	.7	1.3	2.6	mg/kg	J	6010B	05/18/15	1
Lead J ICS-L	7439-92-1	3.6	.25	0.33	0.66	mg/kg		6010B	05/18/15	1
Manganese J MS-L	7439-96-5	92.	.16	0.66	1.3	mg/kg		6010B	05/18/15	1
Nickel ~~J ICS-L~~	7440-02-0	2.8	.65	1.3	2.6	mg/kg		6010B	05/18/15	1
Selenium ~~J ICS-H, MS-H~~ SQL-H	7782-49-2	1.2	.98	1.3	2.6	mg/kg	J	6010B	05/18/15	1
Silver	7440-22-4	U	.37	0.66	1.3	mg/kg		6010B	05/18/15	1
Thallium	7440-28-0	U	.86	1.3	2.6	mg/kg		6010B	05/18/15	1
Vanadium	7440-62-2	8.0	.32	1.3	2.6	mg/kg		6010B	05/18/15	1
Zinc	7440-66-6	10.	.78	3.3	6.6	mg/kg		6010B	05/18/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FO-I		1900	21	27.	53.	mg/kg		8015	05/14/15	10
C28-C40 Oil Range		13.	.36	2.7	5.3	mg/kg		8015	05/14/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	65.7				% Rec.		8015	05/14/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	0.25	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/14/15	1
Acenaphthene	83-32-9	0.80	.04	0.13	0.40	mg/kg		8270C-SI	05/16/15	50
Acenaphthylene F SQL-I	208-96-8	0.21	.04	0.13	0.40	mg/kg	J	8270C-SI	05/16/15	50
Benzo(a)anthracene F SQL-I	56-55-3	0.0037	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/14/15	1
Benzo(a)pyrene F SQL-I	50-32-8	0.0020	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/14/15	1
Benzo(b)fluoranthene F SQL-I	205-99-2	0.0028	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/14/15	1
Benzo(g,h,i)perylene F SQL-I	191-24-2	0.00088	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/14/15	1
Benzo(k)fluoranthene	207-08-9	U	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/14/15	1
Chrysene F SQL-I	218-01-9	0.0068	.0008	0.0027	0.0080	mg/kg	J	8270C-SI	05/14/15	1
Dibenz(a,h)anthracene	53-70-3	U	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/14/15	1
Fluoranthene	206-44-0	0.011	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/14/15	1
Fluorene	86-73-7	1.6	.04	0.13	0.40	mg/kg		8270C-SI	05/16/15	50
Indeno(1,2,3-cd)pyrene	193-39-5	U	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/14/15	1
Naphthalene	91-20-3	1.5	.13	0.40	1.3	mg/kg		8270C-SI	05/16/15	50

Results listed are dry weight basis.
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:10
L763938-08 (PH) - 7.7 at 20.0c
L763938-08 (SV8270BNA) - Dilution due to matrix

AK 09/10/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-08

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W07-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenanthrene	85-01-8	3.7	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/14/15	1
Pyrene	129-00-0	0.089	.0008	0.0027	0.0080	mg/kg		8270C-SI	05/14/15	1
1-Methylnaphthalene	90-12-0	16.	.13	0.40	1.3	mg/kg		8270C-SI	05/16/15	50
2-Methylnaphthalene	91-57-6	U	.13	0.40	1.3	mg/kg		8270C-SI	05/16/15	50
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	53.4				% Rec.		8270C-SI	05/14/15	1
Nitrobenzene-d5	4165-60-0	987.				% Rec.	J7	8270C-SI	05/16/15	50
2-Fluorobiphenyl	321-60-8	58.3				% Rec.	J7	8270C-SI	05/16/15	50
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.01	0.22	0.44	mg/kg		8270C	05/14/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.22	0.44	mg/kg		8270C	05/14/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.01	0.22	0.44	mg/kg		8270C	05/14/15	1
Benzyl Alcohol	100-51-6	U	.01	0.22	0.44	mg/kg		8270C	05/14/15	1
Carbazole	86-74-8	U	.0069	0.22	0.44	mg/kg		8270C	05/14/15	1
Benzoic acid DNR	~~65-85-0~~	~~U~~	~~.16~~	~~2.2~~	~~4.4~~	~~mg/kg~~		~~8270C~~	~~05/14/~~15	1
Dibenzofuran	132-64-9	U	.034	1.1	2.2	mg/kg		8270C	05/14/15	5
4-Bromophenyl-phenylether	101-55-3	U	.015	0.22	0.44	mg/kg		8270C	05/14/15	1
2-Chloronaphthalene	91-58-7	U	.042	0.11	0.22	mg/kg		8270C	05/14/15	5
4-Chlorophenyl-phenylether	7005-72-3	U	.041	1.1	2.2	mg/kg		8270C	05/14/15	5
3,3-Dichlorobenzidine	91-94-1	U	.1	0.22	0.44	mg/kg		8270C	05/14/15	1
2,4-Dinitrotoluene	121-14-2	U	.04	1.1	2.2	mg/kg		8270C	05/14/15	5
2,6-Dinitrotoluene	606-20-2	U	.049	1.1	2.2	mg/kg		8270C	05/14/15	5
Hexachlorobenzene	118-74-1	U	.011	0.22	0.44	mg/kg		8270C	05/14/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.013~~	~~0.22~~	~~0.44~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Hexachloroethane	67-72-1	U	.017	0.22	0.44	mg/kg		8270C	05/14/15	1
Isophorone	78-59-1	U	.0069	0.22	0.44	mg/kg		8270C	05/14/15	1
Nitrobenzene	98-95-3	U	.0093	0.22	0.44	mg/kg		8270C	05/14/15	1
n-Nitrosodimethylamine	62-75-9	U	.086	0.22	0.44	mg/kg		8270C	05/14/15	1
n-Nitrosodiphenylamine	86-30-6	1.5	.0078	0.22	0.44	mg/kg		8270C	05/14/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.22	0.44	mg/kg		8270C	05/14/15	1
Benzylbutyl phthalate	85-68-7	U	.013	0.22	0.44	mg/kg		8270C	05/14/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.016	0.22	0.44	mg/kg		8270C	05/14/15	1
Di-n-butyl phthalate	84-74-2	U	.015	0.22	0.44	mg/kg		8270C	05/14/15	1
Diethyl phthalate	84-66-2	U	.045	1.1	2.2	mg/kg		8270C	05/14/15	5
Dimethyl phthalate	131-11-3	U	.036	1.1	2.2	mg/kg		8270C	05/14/15	5
Di-n-octyl phthalate	117-84-0	U	.012	0.22	0.44	mg/kg		8270C	05/14/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.012~~	~~0.22~~	~~0.44~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0064	0.22	0.44	mg/kg		8270C	05/14/15	1
2-Chlorophenol	95-57-8	U	.011	0.22	0.44	mg/kg		8270C	05/14/15	1
2,4-Dichlorophenol	120-83-2	U	.01	0.22	0.44	mg/kg		8270C	05/14/15	1
2,4-Dimethylphenol	105-67-9	U	.062	0.22	0.44	mg/kg		8270C	05/14/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.16	0.22	0.44	mg/kg		8270C	05/14/15	1
2,4-Dinitrophenol	51-28-5	U	.65	1.1	2.2	mg/kg		8270C	05/14/15	5

Results listed are dry weight basis.
U = Not Detected at the LOD
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L763938-08 (PH) - 7.7 at 20.0c
L763938-08 (SV8270BNA) - Dilution due to matrix

DNR = Do not report

KK 09/10/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-08

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W07-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2-Methylphenol	95-48-7	U	.013	0.22	0.44	mg/kg		8270C	05/14/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.01	0.22	0.44	mg/kg		8270C	05/14/15	1
2-Nitrophenol	88-75-5	U	.017	0.22	0.44	mg/kg		8270C	05/14/15	1
4-Nitrophenol	100-02-7	U	.34	1.1	2.2	mg/kg		8270C	05/14/15	5
4-Chloroaniline	106-47-8	U	.0046	0.22	0.44	mg/kg		8270C	05/14/15	1
2-Nitroaniline	88-74-4	U	.05	1.1	2.2	mg/kg		8270C	05/14/15	5
1,2-Diphenylhydrazine	103-33-3	U	.0093	1.1	2.2	mg/kg		8270C	05/14/15	5
3-Nitroaniline	99-09-2	U	.056	1.1	2.2	mg/kg		8270C	05/14/15	5
4-Nitroaniline	100-01-6	U	.042	1.1	2.2	mg/kg		8270C	05/14/15	5
Pentachlorophenol	87-86-5	U	.064	0.22	0.44	mg/kg		8270C	05/14/15	1
Phenol	108-95-2	U	.0093	0.22	0.44	mg/kg		8270C	05/14/15	1
2,4,5-Trichlorophenol	95-95-4	U	.069	1.1	2.2	mg/kg		8270C	05/14/15	5
2,4,6-Trichlorophenol	88-06-2	U	.052	1.1	2.2	mg/kg		8270C	05/14/15	5
Surrogate Recovery										
2-Fluorophenol	367-12-4	63.1				% Rec.		8270C	05/14/15	1
Phenol-d5	4165-62-2	61.3				% Rec.		8270C	05/14/15	1
Nitrobenzene-d5	4165-60-0	82.2				% Rec.		8270C	05/14/15	1
2-Fluorobiphenyl	321-60-8	59.5				% Rec.		8270C	05/14/15	5
2,4,6-Tribromophenol	118-79-6	87.5				% Rec.		8270C	05/14/15	1
p-Terphenyl-d14	1718-51-0	47.3				% Rec.		8270C	05/14/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:10
L763938-08 (PH) - 7.7 at 20.0c
L763938-08 (SV8270BNA) - Dilution due to matrix

AK 09/10/15

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-09

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W08-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 10:23

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.5	.01			su		9045D	05/12/15	1
Total Solids	TSOLIDS	69.8	.0333			%		2540 G-2	05/13/15	1
Mercury	7439-97-6	U	.004	0.014	0.029	mg/kg		7471A	05/11/15	1
Aluminum	7429-90-5	4900	5	7.2	14.	mg/kg		6010B	05/19/15	1
Antimony UJ ICS-L, MS-L	7440-36-0	U	1.1	1.4	2.9	mg/kg		6010B	05/18/15	1
Arsenic UJ ICS-L	7440-38-2	U	.93	1.4	2.9	mg/kg		6010B	05/18/15	1
Barium	7440-39-3	33.	.24	0.36	0.72	mg/kg		6010B	05/18/15	1
Beryllium F SQL-I	7440-41-7	0.14	.1	0.14	0.29	mg/kg	J	6010B	05/18/15	1
Cadmium UJ ICS-L	7440-43-9	U	.1	0.36	0.72	mg/kg		6010B	05/18/15	1
Chromium	7440-47-3	4.6	.2	0.72	1.4	mg/kg		6010B	05/18/15	1
Cobalt F SQL-I	7440-48-4	1.1	.33	0.72	1.4	mg/kg	J	6010B	05/18/15	1
Copper	7440-50-8	U	.76	1.4	2.9	mg/kg		6010B	05/18/15	1
Lead J ICS-L	7439-92-1	2.0	.27	0.36	0.72	mg/kg		6010B	05/18/15	1
Manganese J MS-L	7439-96-5	70.	.17	0.72	1.4	mg/kg		6010B	05/18/15	1
Nickel ~~F1 ICS-L~~ SQL-I	7440-02-0	2.3	.7	1.4	2.9	mg/kg	J	6010B	05/18/15	1
Selenium F1 ICS-H, MS-H, SQL-H	7782-49-2	1.6	1.1	1.4	2.9	mg/kg	J	6010B	05/18/15	1
Silver	7440-22-4	U	.4	0.72	1.4	mg/kg		6010B	05/18/15	1
Thallium	7440-28-0	U	.93	1.4	2.9	mg/kg		6010B	05/18/15	1
Vanadium	7440-62-2	8.4	.34	1.4	2.9	mg/kg		6010B	05/18/15	1
Zinc	7440-66-6	11.	.84	3.6	7.2	mg/kg		6010B	05/18/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range UJ FD-I		U	2.3	2.9	5.7	mg/kg		8015	05/14/15	1
C28-C40 Oil Range		U	.39	2.9	5.7	mg/kg		8015	05/14/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	69.6				% Rec.		8015	05/14/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Acenaphthene	83-32-9	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Acenaphthylene	208-96-8	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Benzo(a)anthracene	56-55-3	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Benzo(a)pyrene	50-32-8	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Benzo(b)fluoranthene	205-99-2	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Benzo(k)fluoranthene	207-08-9	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Chrysene	218-01-9	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Fluoranthene	206-44-0	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Fluorene	86-73-7	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
Naphthalene	91-20-3	U	.0029	0.0086	0.029	mg/kg		8270C-SI	05/14/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-09

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W08-09-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/06/15 10:23

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenanthrene F SQL-I	85-01-8	0.0012	.00086	0.0029	0.0086	mg/kg	J	8270C-SI	05/14/15	1
Pyrene	129-00-0	U	.00086	0.0029	0.0086	mg/kg		8270C-SI	05/14/15	1
1-Methylnaphthalene F SQL-I	90-12-0	0.0037	.0029	0.0086	0.029	mg/kg	J	8270C-SI	05/14/15	1
2-Methylnaphthalene	91-57-6	U	.0029	0.0086	0.029	mg/kg		8270C-SI	05/14/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	46.0				% Rec.		8270C-SI	05/14/15	1
Nitrobenzene-d5	4165-60-0	81.0				% Rec.		8270C-SI	05/14/15	1
2-Fluorobiphenyl	321-60-8	69.4				% Rec.		8270C-SI	05/14/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.011	0.24	0.48	mg/kg		8270C	05/14/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.013	0.24	0.48	mg/kg		8270C	05/14/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.011	0.24	0.48	mg/kg		8270C	05/14/15	1
Benzyl Alcohol	100-51-6	U	.011	0.24	0.48	mg/kg		8270C	05/14/15	1
Carbazole	86-74-8	U	.0074	0.24	0.48	mg/kg		8270C	05/14/15	1
Benzoic acid A	~~65-85-0~~	~~U~~	~~.17~~	~~2.4~~	~~4.8~~	~~mg/kg~~		~~8270C~~	~~05/14~~/15	1
Dibenzofuran	132-64-9	U	.0074	0.24	0.48	mg/kg		8270C	05/14/15	1
4-Bromophenyl-phenylether	101-55-3	U	.016	0.24	0.48	mg/kg		8270C	05/14/15	1
2-Chloronaphthalene	91-58-7	U	.0092	0.024	0.047	mg/kg		8270C	05/14/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.009	0.24	0.48	mg/kg		8270C	05/14/15	1
3,3-Dichlorobenzidine	91-94-1	U	.11	0.24	0.48	mg/kg		8270C	05/14/15	1
2,4-Dinitrotoluene	121-14-2	U	.0087	0.24	0.48	mg/kg		8270C	05/14/15	1
2,6-Dinitrotoluene	606-20-2	U	.011	0.24	0.48	mg/kg		8270C	05/14/15	1
Hexachlorobenzene	118-74-1	U	.012	0.24	0.48	mg/kg		8270C	05/14/15	1
Hexachloro-1,3-butadiene ONR	~~87-68-3~~	~~U~~	~~.014~~	~~0.24~~	~~0.48~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Hexachloroethane	67-72-1	U	.019	0.24	0.48	mg/kg		8270C	05/14/15	1
Isophorone	78-59-1	U	.0074	0.24	0.48	mg/kg		8270C	05/14/15	1
Nitrobenzene	98-95-3	U	.01	0.24	0.48	mg/kg		8270C	05/14/15	1
n-Nitrosodimethylamine	62-75-9	U	.093	0.24	0.48	mg/kg		8270C	05/14/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0084	0.24	0.48	mg/kg		8270C	05/14/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.013	0.24	0.48	mg/kg		8270C	05/14/15	1
Benzylbutyl phthalate	85-68-7	U	.014	0.24	0.48	mg/kg		8270C	05/14/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.017	0.24	0.48	mg/kg		8270C	05/14/15	1
Di-n-butyl phthalate	84-74-2	U	.016	0.24	0.48	mg/kg		8270C	05/14/15	1
Diethyl phthalate	84-66-2	U	.0099	0.24	0.48	mg/kg		8270C	05/14/15	1
Dimethyl phthalate	131-11-3	U	.0077	0.24	0.48	mg/kg		8270C	05/14/15	1
Di-n-octyl phthalate	117-84-0	U	.013	0.24	0.48	mg/kg		8270C	05/14/15	1
1,2,4-Trichlorobenzene ONR	~~120-82-1~~	~~U~~	~~.013~~	~~0.24~~	~~0.48~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0069	0.24	0.48	mg/kg		8270C	05/14/15	1
2-Chlorophenol	95-57-8	U	.012	0.24	0.48	mg/kg		8270C	05/14/15	1
2,4-Dichlorophenol	120-83-2	U	.011	0.24	0.48	mg/kg		8270C	05/14/15	1
2,4-Dimethylphenol	105-67-9	U	.067	0.24	0.48	mg/kg		8270C	05/14/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.17	0.24	0.48	mg/kg		8270C	05/14/15	1
2,4-Dinitrophenol	51-28-5	U	.14	0.24	0.48	mg/kg		8270C	05/14/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

Date Received : May 08, 2015
Description : Holloman AFB

Sample ID : TU-503-EX01-W08-09-N

Collected By : Jon Mallonee
Collection Date : 05/06/15 10:23

ESC Sample # : L763938-09

Site ID :

Project # : 23446543.0055AA

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2-Methylphenol	95-48-7	U	.014	0.24	0.48	mg/kg		8270C	05/14/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.011	0.24	0.48	mg/kg		8270C	05/14/15	1
2-Nitrophenol	88-75-5	U	.019	0.24	0.48	mg/kg		8270C	05/14/15	1
4-Nitrophenol	100-02-7	U	.074	0.24	0.48	mg/kg		8270C	05/14/15	1
4-Chloroaniline	106-47-8	U	.005	0.24	0.48	mg/kg		8270C	05/14/15	1
2-Nitroaniline	88-74-4	U	.011	0.24	0.48	mg/kg		8270C	05/14/15	1
1,2-Diphenylhydrazine	103-33-3	U	.002	0.24	0.48	mg/kg		8270C	05/14/15	1
3-Nitroaniline	99-09-2	U	.012	0.24	0.48	mg/kg		8270C	05/14/15	1
4-Nitroaniline	100-01-6	U	.0092	0.24	0.48	mg/kg		8270C	05/14/15	1
Pentachlorophenol	87-86-5	U	.069	0.24	0.48	mg/kg		8270C	05/14/15	1
Phenol	108-95-2	U	.01	0.24	0.48	mg/kg		8270C	05/14/15	1
2,4,5-Trichlorophenol	95-95-4	U	.014	0.24	0.48	mg/kg		8270C	05/14/15	1
2,4,6-Trichlorophenol	88-06-2	U	.011	0.24	0.48	mg/kg		8270C	05/14/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	55.4				% Rec.		8270C	05/14/15	1
Phenol-d5	4165-62-2	53.6				% Rec.		8270C	05/14/15	1
Nitrobenzene-d5	4165-60-0	57.7				% Rec.		8270C	05/14/15	1
2-Fluorobiphenyl	321-60-8	64.9				% Rec.		8270C	05/14/15	1
2,4,6-Tribromophenol	118-79-6	65.6				% Rec.		8270C	05/14/15	1
p-Terphenyl-d14	1718-51-0	48.6				% Rec.		8270C	05/14/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-10

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W0-F01-12-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 10:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
pH	00010-29-7	7.5	.01			su		9045D	05/12/15	1
Total Solids	TSOLIDS	76.7	.0333			%		2540 G-2	05/13/15	1
Mercury	7439-97-6	U	.0036	0.013	0.026	mg/kg		7471A	05/11/15	1
Aluminum J PDS-H	7429-90-5	23000	4.6	6.5	13.	mg/kg	O1V	6010B	05/19/15	1
Antimony UJ ICS, ICSMS-L	7440-36-0	U	.98	1.3	2.6	mg/kg	J6	6010B	05/18/15	1
Arsenic J ICS-L	7440-38-2	4.4	.85	1.3	2.6	mg/kg		6010B	05/18/15	1
Barium	7440-39-3	65.	.22	0.33	0.65	mg/kg		6010B	05/18/15	1
Beryllium	7440-41-7	1.3	.091	0.13	0.26	mg/kg		6010B	05/18/15	1
Cadmium UJ ICS-L	7440-43-9	U	.091	0.33	0.65	mg/kg		6010B	05/18/15	1
Chromium J BL-L	7440-47-3	23.	.18	0.65	1.3	mg/kg		6010B	05/18/15	1
Cobalt	7440-48-4	11.	.3	0.65	1.3	mg/kg		6010B	05/18/15	1
Copper	7440-50-8	10.	.69	1.3	2.6	mg/kg		6010B	05/18/15	1
Lead J ICS-L	7439-92-1	11.	.25	0.33	0.65	mg/kg		6010B	05/18/15	1
Manganese J BL-L	7439-96-5	180	.16	0.65	1.3	mg/kg		6010B	05/18/15	1
Nickel	7440-02-0	20.	.64	1.3	2.6	mg/kg		6010B	05/18/15	1
Selenium J ~~ICS-H, MS-H~~ ICS-H	7782-49-2	3.1	.96	1.3	2.6	mg/kg		6010B	05/18/15	1
Silver	7440-22-4	U	.36	0.65	1.3	mg/kg		6010B	05/18/15	1
Thallium	7440-28-0	U	.85	1.3	2.6	mg/kg		6010B	05/18/15	1
Vanadium	7440-62-2	44.	.31	1.3	2.6	mg/kg		6010B	05/18/15	1
Zinc	7440-66-6	55.	.77	3.3	6.5	mg/kg		6010B	05/18/15	1
Diesel and Oil Ranges										
C10-C28 Diesel Range J FO-I		5.3	2.1	2.6	5.2	mg/kg		8015	05/14/15	1
C28-C40 Oil Range		U	.35	2.6	5.2	mg/kg		8015	05/14/15	1
Surrogate Recovery										
o-Terphenyl	84-15-1	69.3				% Rec.		8015	05/14/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Acenaphthene	83-32-9	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Acenaphthylene	208-96-8	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Benzo(a)anthracene	56-55-3	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Benzo(a)pyrene	50-32-8	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Benzo(b)fluoranthene	205-99-2	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Benzo(g,h,i)perylene	191-24-2	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Benzo(k)fluoranthene	207-08-9	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Chrysene	218-01-9	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Dibenz(a,h)anthracene	53-70-3	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Fluoranthene	206-44-0	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Fluorene F SQL-I	86-73-7	0.00081	.00078	0.0026	0.0078	mg/kg	J	8270C-SI	05/13/15	1
Indeno(1,2,3-cd)pyrene	193-39-5	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
Naphthalene	91-20-3	U	.0026	0.0078	0.026	mg/kg		8270C-SI	05/13/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-10

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W0-F01-12-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 10:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Phenanthrene F SQL-I	85-01-8	0.0018	.00078	0.0026	0.0078	mg/kg	J	8270C-SI	05/13/15	1
Pyrene	129-00-0	U	.00078	0.0026	0.0078	mg/kg		8270C-SI	05/13/15	1
1-Methylnaphthalene F SQL-I	90-12-0	0.0043	.0026	0.0078	0.026	mg/kg	J	8270C-SI	05/13/15	1
2-Methylnaphthalene F SQL-I	91-57-6	0.0052	.0026	0.0078	0.026	mg/kg	J	8270C-SI	05/13/15	1
Surrogate Recovery										
p-Terphenyl-d14	1718-51-0	53.8				% Rec.		8270C-SI	05/13/15	1
Nitrobenzene-d5	4165-60-0	75.8				% Rec.		8270C-SI	05/13/15	1
2-Fluorobiphenyl	321-60-8	60.3				% Rec.		8270C-SI	05/13/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	.01	0.22	0.43	mg/kg		8270C	05/14/15	1
Bis(2-chloroethyl)ether	111-44-4	U	.012	0.22	0.43	mg/kg		8270C	05/14/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	.0099	0.22	0.43	mg/kg		8270C	05/14/15	1
Benzyl Alcohol	100-51-6	U	.0098	0.22	0.43	mg/kg		8270C	05/14/15	1
Carbazole	86-74-8	U	.0068	0.22	0.43	mg/kg		8270C	05/14/15	1
Benzoic acid R	~~65-85-0~~	~~U~~	~~.16~~	~~2.2~~	~~4.3~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Dibenzofuran	132-64-9	U	.0068	0.22	0.43	mg/kg		8270C	05/14/15	1
4-Bromophenyl-phenylether	101-55-3	U	.014	0.22	0.43	mg/kg		8270C	05/14/15	1
2-Chloronaphthalene	91-58-7	U	.0083	0.022	0.043	mg/kg		8270C	05/14/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	.0082	0.22	0.43	mg/kg		8270C	05/14/15	1
3,3-Dichlorobenzidine	91-94-1	U	.1	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4-Dinitrotoluene	121-14-2	U	.008	0.22	0.43	mg/kg		8270C	05/14/15	1
2,6-Dinitrotoluene	606-20-2	U	.0096	0.22	0.43	mg/kg		8270C	05/14/15	1
Hexachlorobenzene	118-74-1	U	.011	0.22	0.43	mg/kg		8270C	05/14/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~.013~~	~~0.22~~	~~0.43~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Hexachloroethane	67-72-1	U	.017	0.22	0.43	mg/kg		8270C	05/14/15	1
Isophorone	78-59-1	U	.0068	0.22	0.43	mg/kg		8270C	05/14/15	1
Nitrobenzene	98-95-3	U	.0091	0.22	0.43	mg/kg		8270C	05/14/15	1
n-Nitrosodimethylamine	62-75-9	U	.085	0.22	0.43	mg/kg		8270C	05/14/15	1
n-Nitrosodiphenylamine	86-30-6	U	.0077	0.22	0.43	mg/kg		8270C	05/14/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	.012	0.22	0.43	mg/kg		8270C	05/14/15	1
Benzylbutyl phthalate	85-68-7	U	.013	0.22	0.43	mg/kg		8270C	05/14/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	.016	0.22	0.43	mg/kg		8270C	05/14/15	1
Di-n-butyl phthalate	84-74-2	U	.014	0.22	0.43	mg/kg		8270C	05/14/15	1
Diethyl phthalate	84-66-2	U	.009	0.22	0.43	mg/kg		8270C	05/14/15	1
Dimethyl phthalate	131-11-3	U	.007	0.22	0.43	mg/kg		8270C	05/14/15	1
Di-n-octyl phthalate	117-84-0	U	.012	0.22	0.43	mg/kg		8270C	05/14/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~.011~~	~~0.22~~	~~0.43~~	~~mg/kg~~		~~8270C~~	~~05/14/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol	59-50-7	U	.0062	0.22	0.43	mg/kg		8270C	05/14/15	1
2-Chlorophenol	95-57-8	U	.011	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4-Dichlorophenol	120-83-2	U	.0098	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4-Dimethylphenol	105-67-9	U	.061	0.22	0.43	mg/kg		8270C	05/14/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	.16	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4-Dinitrophenol	51-28-5	U	.13	0.22	0.43	mg/kg		8270C	05/14/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
Note:
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The reported analytical results relate only to the sample submitted
Reported: 07/01/15 16:52 Revised: 07/09/15 13:10
L763938-10 (PH) - 7.5 at 20.2c

AK 09/10/15

DNR = Do Not Report

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

July 09,2015

ESC Sample # : L763938-10

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU-503-EX01-W0-F01-12-N

Project # : 23446543.0055AA

Collected By : Jon Mallonee
Collection Date : 05/05/15 10:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
2-Methylphenol	95-48-7	U	.013	0.22	0.43	mg/kg		8270C	05/14/15	1
3&4-Methyl Phenol	3&4-Methyl	U	.01	0.22	0.43	mg/kg		8270C	05/14/15	1
2-Nitrophenol	88-75-5	U	.017	0.22	0.43	mg/kg		8270C	05/14/15	1
4-Nitrophenol	100-02-7	U	.068	0.22	0.43	mg/kg		8270C	05/14/15	1
4-Chloroaniline	106-47-8	U	.0046	0.22	0.43	mg/kg		8270C	05/14/15	1
2-Nitroaniline	88-74-4	U	.0099	0.22	0.43	mg/kg		8270C	05/14/15	1
1,2-Diphenylhydrazine	103-33-3	U	.0018	0.22	0.43	mg/kg		8270C	05/14/15	1
3-Nitroaniline	99-09-2	U	.011	0.22	0.43	mg/kg		8270C	05/14/15	1
4-Nitroaniline	100-01-6	U	.0083	0.22	0.43	mg/kg		8270C	05/14/15	1
Pentachlorophenol	87-86-5	U	.062	0.22	0.43	mg/kg		8270C	05/14/15	1
Phenol	108-95-2	U	.0091	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4,5-Trichlorophenol	95-95-4	U	.013	0.22	0.43	mg/kg		8270C	05/14/15	1
2,4,6-Trichlorophenol	88-06-2	U	.01	0.22	0.43	mg/kg		8270C	05/14/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	60.0				% Rec.		8270C	05/14/15	1
Phenol-d5	4165-62-2	54.3				% Rec.		8270C	05/14/15	1
Nitrobenzene-d5	4165-60-0	55.7				% Rec.		8270C	05/14/15	1
2-Fluorobiphenyl	321-60-8	62.1				% Rec.		8270C	05/14/15	1
2,4,6-Tribromophenol	118-79-6	58.1				% Rec.		8270C	05/14/15	1
p-Terphenyl-d14	1718-51-0	55.1				% Rec.		8270C	05/14/15	1

Results listed are dry weight basis.
U = Not Detected at the LOD
Note:
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Reported: 07/01/15 16:52 Revised: 07/09/15 13:10
L763938-10 (PH) - 7.5 at 20.2c

Ak 09/10/15

Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L764216
Sampling Event Dates: May 5-6, 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: August 18, 2015
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						
				GRO	VOCs	PAHs	DRO/ORO	SVOCs	Total Metals	pH
L764216										
TU503-EX01-W01-09-N	SA	L764216-01	Soil	X	X	---	---	---	---	---
TU503-EX01-W02-09-N	SA	L764216-02	Soil	X	X	---	---	---	---	---
TU503-EX01-W03-09-N	SA	L764216-03	Soil	X	X	---	---	---	---	---
TU503-EX01-W04-09-N	SA	L764216-04	Soil	X	X	---	---	---	---	---
TU503-EX01-F02-13-N	SA	L764216-05	Soil	X	X	---	---	---	---	---
TU503-EX01-W05-09-N	SA	L764216-06	Soil	X	X	---	---	---	---	---
TU503-EX01-W06-09-N	SA	L764216-07	Soil	X	X	---	---	---	---	---
TU503-EX01-W07-09-N	SA	L764216-08	Soil	X	X	---	---	---	---	---
TU503-EX01-W08-09-N	SA	L764216-09	Soil	X	X	---	---	---	---	---
TU503-EX01-F01-12-N	SA	L764216-10	Soil	X^m	X^m	---	---	---	---	---
TU503-TRIPBLANK-01-B	TB	L764216-11	Water	X	X	---	---	---	---	---

Sample Type: SA – Sample TB – Trip Blank
X^m - Matrix Spike/Matrix Spike Duplicate
Analyses: Analyses:
GRO – Gasoline Range Organics (8015D)
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	Yes	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.
Reporting	Yes	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, and no results were changed. 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 • Initial/Continuing Calibration Blank	Yes	Target analytes were not detected within the method or calibration blanks.
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate TU503-EX01-F01-12-N (GRO, VOCs) • Laboratory Duplicate None in this package	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

Review Parameter	Criteria Met?	Comment
		Section 4.1 of the data validation report for overall qualifiers resulting from the MS/MSD evaluation. **Laboratory Duplicate** A laboratory duplicate was not performed on a sample from this data package.
Method Quality Control • Surrogates (VOCs, GRO)	Yes	The surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank TU503-TRIPBLANK-01-B (GRO, VOCs) • Field Duplicate None in this package • Equipment Blank None in this package • Field Blank None in this package	Yes	**Trip Blank** Target analytes were not detected in the trip blank. **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. A field blank was not submitted with this data package. 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 volatile organic compound (VOC) and gasoline range organic (GRO) results were reported as non-detect at elevated limits of detection (LODs). See Section 3.7 of the validation report for further discussion.
Other Parameters	Yes	Naphthalene (8260B and 8270C-polynuclear aromatic hydrocarbons (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 detection limit (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	**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 the entire carbon range of C10-C40. 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 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 all target compounds in the initial calibration verifications (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
DLs – Detection Limits
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
PAHs – Polynuclear Aromatic Hydrocarbons
QAPP – Quality Assurance Project Plan
RPDs – Relative Percent Differences
RRF – Relative Response Factor
SOP – Standard Operating Procedure
SPCCs – System Performance Check Compounds
VOCs – Volatile Organic Compounds

Table 1: Initial/Continuing Calibration Verification Outliers and Resultant Data Qualification

Associated Samples	Analyte	%D (Limit)	Data Qualification
VOCs			
TU503-EX01-W01-09-N TU503-EX01-W02-09-N TU503-EX01-W03-09-N TU503-EX01-W04-09-N TU503-EX01-F02-13-N TU503-EX01-W05-09-N TU503-EX01-W06-09-N TU503-EX01-W07-09-N TU503-EX01-W08-09-N TU503-EX01-F01-12-N TU503-TRIPBLANK-01-B	Acetone	+53.3 (±20)	As the potential bias was considered to be high and the associated acetone results were reported as non-detect, data qualification was not considered necessary.
	Naphthalene	-23.4 (±20)	As the potential bias was considered to be low, the associated results were qualified as estimated (UJ/J CCAL-L).
	1,2,3-Trichlorobenzene	-21.8 (±20)	
TU503-TRIPBLANK-01-B	Bromomethane	+42.4 (±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.
	Acetone	+62.7 (±20)	
	2-Butanone (MEK)	+21.6 (±20)	

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

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
VOCs				
LCS WG788853 TU503-EX01-W01-09-N TU503-EX01-W02-09-N TU503-EX01-W03-09-N TU503-EX01-W04-09-N TU503-EX01-F02-13-N TU503-EX01-W05-09-N TU503-EX01-W06-09-N TU503-EX01-W07-09-N TU503-EX01-W08-09-N TU503-EX01-F01-12-N	Acetone	**157/143** (40-140)	9.38 (50)	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.
LCS WWG789839 TU503-SB02-NS02 TU503-SB02-NS01		**157/158** (40-140)	0.58 (50)	

%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

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-01

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W01-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:18

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	180	1.1	2.5	4.9	mg/kg		8015D/G	05/12/15	49
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	98.2				% Rec.		8015D/G	05/12/15	1
Volatile Organics										
Acetone	67-64-1	U	.22	0.54	1.075	mg/kg		8260B	05/18/15	21.5
Benzene	71-43-2	U	.0058	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Bromobenzene	108-86-1	U	.0061	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Bromochloromethane	74-97-5	U	.0084	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Bromodichloromethane	75-27-4	U	.0055	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Bromoform	75-25-2	U	.0091	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Bromomethane	74-83-9	U	.029	0.054	.1075	mg/kg		8260B	05/18/15	21.5
n-Butylbenzene	104-51-8	0.52	.0055	0.011	.0215	mg/kg		8260B	05/18/15	21.5
sec-Butylbenzene	135-98-8	0.23	.0043	0.011	.0215	mg/kg		8260B	05/18/15	21.5
tert-Butylbenzene F SQL-I	98-06-6	0.012	.0044	0.011	.0215	mg/kg	J	8260B	05/18/15	21.5
Carbon Disulfide	75-15-0	U	.006	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Carbon tetrachloride	56-23-5	U	.007	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Chlorobenzene	108-90-7	U	.0046	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Chlorodibromomethane	124-48-1	U	.008	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Chloroethane	75-00-3	U	.02	0.054	.1075	mg/kg		8260B	05/18/15	21.5
Chloroform	67-66-3	U	.0049	0.054	.1075	mg/kg		8260B	05/18/15	21.5
Chloromethane	74-87-3	U	.0081	0.011	.05375	mg/kg		8260B	05/18/15	21.5
2-Chlorotoluene	95-49-8	U	.0065	0.011	.0215	mg/kg		8260B	05/18/15	21.5
4-Chlorotoluene	106-43-4	U	.0052	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,2-Dibromo-3-Chloropropane	96-12-8	U	.022	0.054	.1075	mg/kg		8260B	05/18/15	21.5
1,2-Dibromoethane	106-93-4	U	.0074	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Dibromomethane	74-95-3	U	.0082	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,2-Dichlorobenzene	95-50-1	U	.0066	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,3-Dichlorobenzene	541-73-1	U	.0051	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,4-Dichlorobenzene	106-46-7	U	.0048	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Dichlorodifluoromethane	75-71-8	U	.015	0.054	.1075	mg/kg		8260B	05/18/15	21.5
1,1-Dichloroethane	75-34-3	U	.0043	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,2-Dichloroethane	107-06-2	U	.0057	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,1-Dichloroethene	75-35-4	U	.0065	0.011	.0215	mg/kg		8260B	05/18/15	21.5
cis-1,2-Dichloroethene	156-59-2	U	.005	0.011	.0215	mg/kg		8260B	05/18/15	21.5
trans-1,2-Dichloroethene	156-60-5	U	.0057	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,2-Dichloropropane	78-87-5	U	.0077	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,1-Dichloropropene	563-58-6	U	.0068	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,3-Dichloropropane	142-28-9	U	.0044	0.011	.0215	mg/kg		8260B	05/18/15	21.5
cis-1,3-Dichloropropene	10061-01-5	U	.0056	0.011	.0215	mg/kg		8260B	05/18/15	21.5
trans-1,3-Dichloropropene	10061-02-6	U	.0057	0.011	.0215	mg/kg		8260B	05/18/15	21.5
2,2-Dichloropropane	594-20-7	U	.006	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Ethylbenzene	100-41-4	0.065	.0064	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Hexachloro-1,3-butadiene	87-68-3	U	.0074	0.011	.0215	mg/kg		8260B	05/18/15	21.5
2-Hexanone	591-78-6	U	.082	0.11	.215	mg/kg		8260B	05/18/15	21.5
Isopropylbenzene	98-82-8	0.080	.0052	0.011	.0215	mg/kg		8260B	05/18/15	21.5

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

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-01

Site ID :

Project # : 23446543.00554A

Date Received : May 08, 2015
Description : Holloman AFB

Sample ID : TU503-EX01-W01-09-N

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:18

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	0.32	.0044	0.011	.0215	mg/kg		8260B	05/18/15	21.5
2-Butanone (MEK) F SQL-I	78-93-3	0.15	.1	0.11	.215	mg/kg	J	8260B	05/18/15	21.5
Methylene Chloride	75-09-2	U	.022	0.054	.1075	mg/kg		8260B	05/18/15	21.5
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.04	0.11	.215	mg/kg		8260B	05/18/15	21.5
Methyl tert-butyl ether	1634-04-4	U	.0046	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Naphthalene ~~U-CCAL-L~~ ONR	~~91-20-3~~	~~2.8~~	~~.022~~	~~0.054~~	~~.1075~~	~~mg/kg~~		~~8260B~~	~~05/18/15~~	~~21.5~~
n-Propylbenzene	103-65-1	0.18	.0044	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Styrene	100-42-5	U	.005	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,1,1,2-Tetrachloroethane	630-20-6	U	.0057	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,1,2,2-Tetrachloroethane	79-34-5	U	.0078	0.016	.0215	mg/kg		8260B	05/18/15	21.5
Tetrachloroethene	127-18-4	U	.0059	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Toluene	108-88-3	U	.0093	0.054	.1075	mg/kg		8260B	05/18/15	21.5
1,2,3-Trichlorobenzene U-CCAL-L	87-61-6	U	.0066	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,2,4-Trichlorobenzene	120-82-1	U	.0083	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,1,1-Trichloroethane	71-55-6	U	.00615	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,1,2-Trichloroethane	79-00-5	U	.006	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Trichloroethene	79-01-6	U	.006	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Trichlorofluoromethane	75-69-4	U	.0082	0.054	.1075	mg/kg		8260B	05/18/15	21.5
1,2,3-Trichloropropane	96-18-4	U	.016	0.022	.05375	mg/kg		8260B	05/18/15	21.5
1,2,4-Trimethylbenzene	95-63-6	0.48	.0045	0.011	.0215	mg/kg		8260B	05/18/15	21.5
1,3,5-Trimethylbenzene	108-67-8	0.61	.0057	0.011	.0215	mg/kg		8260B	05/18/15	21.5
o-Xylene	95-47-6	0.040	.0073	0.011	.0215	mg/kg		8260B	05/18/15	21.5
m&p-Xylene F SQL-I	1330-20-7	0.020	.015	0.022	.043	mg/kg	J	8260B	05/18/15	21.5
Vinyl chloride	75-01-4	U	.0062	0.011	.0215	mg/kg		8260B	05/18/15	21.5
Surrogate Recovery										
Toluene-d8	2037-26-5	107.				% Rec.		8260B	05/18/15	1
Dibromofluoromethane	1868-53-7	108.				% Rec.		8260B	05/18/15	1
4-Bromofluorobenzene	460-00-4	102.				% Rec.		8260B	05/18/15	1

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

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-02

Site ID :

Project # : 23446543.00554A

Date Received : May 08, 2015
Description : Holloman AFB

Sample ID : TU503-EX01-W02-09-N

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	97.	.48	1.1	2.2	mg/kg		8015D/G	05/12/15	22
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	97.3				% Rec.		8015D/G	05/12/15	1
Volatile Organics										
Acetone	67-64-1	U	.21	0.53	1.05	mg/kg		8260B	05/18/15	21
Benzene F SQL-I	71-43-2	0.021	.0057	0.011	.021	mg/kg	J	8260B	05/18/15	21
Bromobenzene	108-86-1	U	.006	0.011	.021	mg/kg		8260B	05/18/15	21
Bromochloromethane	74-97-5	U	.0082	0.011	.021	mg/kg		8260B	05/18/15	21
Bromodichloromethane	75-27-4	U	.0053	0.011	.021	mg/kg		8260B	05/18/15	21
Bromoform	75-25-2	U	.0089	0.011	.021	mg/kg		8260B	05/18/15	21
Bromomethane	74-83-9	U	.028	0.053	.105	mg/kg		8260B	05/18/15	21
n-Butylbenzene	104-51-8	2.3	.0054	0.011	.021	mg/kg		8260B	05/18/15	21
sec-Butylbenzene	135-98-8	0.84	.0042	0.011	.021	mg/kg		8260B	05/18/15	21
tert-Butylbenzene F SQL-I	98-06-6	0.018	.0043	0.011	.021	mg/kg	J	8260B	05/18/15	21
Carbon Disulfide	75-15-0	U	.0059	0.011	.021	mg/kg		8260B	05/18/15	21
Carbon tetrachloride	56-23-5	U	.0069	0.011	.021	mg/kg		8260B	05/18/15	21
Chlorobenzene	108-90-7	U	.0044	0.011	.021	mg/kg		8260B	05/18/15	21
Chlorodibromomethane	124-48-1	U	.0078	0.011	.021	mg/kg		8260B	05/18/15	21
Chloroethane	75-00-3	U	.02	0.053	.105	mg/kg		8260B	05/18/15	21
Chloroform	67-66-3	U	.0048	0.053	.105	mg/kg		8260B	05/18/15	21
Chloromethane	74-87-3	U	.0079	0.011	.0525	mg/kg		8260B	05/18/15	21
2-Chlorotoluene	95-49-8	U	.0063	0.011	.021	mg/kg		8260B	05/18/15	21
4-Chlorotoluene	106-43-4	U	.005	0.011	.021	mg/kg		8260B	05/18/15	21
1,2-Dibromo-3-Chloropropane	96-12-8	U	.022	0.053	.105	mg/kg		8260B	05/18/15	21
1,2-Dibromoethane	106-93-4	U	.0072	0.011	.021	mg/kg		8260B	05/18/15	21
Dibromomethane	74-95-3	U	.008	0.011	.021	mg/kg		8260B	05/18/15	21
1,2-Dichlorobenzene	95-50-1	U	.0064	0.011	.021	mg/kg		8260B	05/18/15	21
1,3-Dichlorobenzene	541-73-1	U	.005	0.011	.021	mg/kg		8260B	05/18/15	21
1,4-Dichlorobenzene	106-46-7	U	.0047	0.011	.021	mg/kg		8260B	05/18/15	21
Dichlorodifluoromethane	75-71-8	U	.015	0.053	.105	mg/kg		8260B	05/18/15	21
1,1-Dichloroethane	75-34-3	U	.0042	0.011	.021	mg/kg		8260B	05/18/15	21
1,2-Dichloroethane	107-06-2	U	.0056	0.011	.021	mg/kg		8260B	05/18/15	21
1,1-Dichloroethene	75-35-4	U	.0064	0.011	.021	mg/kg		8260B	05/18/15	21
cis-1,2-Dichloroethene	156-59-2	U	.0049	0.011	.021	mg/kg		8260B	05/18/15	21
trans-1,2-Dichloroethene	156-60-5	U	.0055	0.011	.021	mg/kg		8260B	05/18/15	21
1,2-Dichloropropane	78-87-5	U	.0075	0.011	.021	mg/kg		8260B	05/18/15	21
1,1-Dichloropropene	563-58-6	U	.0066	0.011	.021	mg/kg		8260B	05/18/15	21
1,3-Dichloropropane	142-28-9	U	.0043	0.011	.021	mg/kg		8260B	05/18/15	21
cis-1,3-Dichloropropene	10061-01-5	U	.0055	0.011	.021	mg/kg		8260B	05/18/15	21
trans-1,3-Dichloropropene	10061-02-6	U	.0056	0.011	.021	mg/kg		8260B	05/18/15	21
2,2-Dichloropropane	594-20-7	U	.0058	0.011	.021	mg/kg		8260B	05/18/15	21
Ethylbenzene	100-41-4	0.76	.0062	0.011	.021	mg/kg		8260B	05/18/15	21
Hexachloro-1,3-butadiene	87-68-3	U	.0072	0.011	.021	mg/kg		8260B	05/18/15	21
2-Hexanone	591-78-6	U	.08	0.11	.21	mg/kg		8260B	05/18/15	21
Isopropylbenzene	98-82-8	0.52	.0051	0.011	.021	mg/kg		8260B	05/18/15	21

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-02

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W02-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	0.99	.0043	0.011	.021	mg/kg		8260B	05/18/15	21
2-Butanone (MEK)	78-93-3	U	.098	0.11	.21	mg/kg		8260B	05/18/15	21
Methylene Chloride	75-09-2	U	.021	0.053	.105	mg/kg		8260B	05/18/15	21
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.039	0.11	.21	mg/kg		8260B	05/18/15	21
Methyl tert-butyl ether	1634-04-4	U	.0044	0.011	.021	mg/kg		8260B	05/18/15	21
Naphthalene JCCAL-L	91-20-3	3.8	.021	0.053	.105	mg/kg		8260B	05/18/15	21
n-Propylbenzene	103-65-1	1.1	.0043	0.011	.021	mg/kg		8260B	05/18/15	21
Styrene	100-42-5	U	.0049	0.011	.021	mg/kg		8260B	05/18/15	21
1,1,1,2-Tetrachloroethane	630-20-6	U	.0055	0.011	.021	mg/kg		8260B	05/18/15	21
1,1,2,2-Tetrachloroethane	79-34-5	U	.0077	0.016	.021	mg/kg		8260B	05/18/15	21
Tetrachloroethene	127-18-4	U	.0058	0.011	.021	mg/kg		8260B	05/18/15	21
Toluene	108-88-3	U	.0091	0.053	.105	mg/kg		8260B	05/18/15	21
1,2,3-Trichlorobenzene U JCCAL-L	87-61-6	U	.0064	0.011	.021	mg/kg		8260B	05/18/15	21
1,2,4-Trichlorobenzene	120-82-1	U	.0081	0.011	.021	mg/kg		8260B	05/18/15	21
1,1,1-Trichloroethane	71-55-6	U	.00601	0.011	.021	mg/kg		8260B	05/18/15	21
1,1,2-Trichloroethane	79-00-5	U	.0058	0.011	.021	mg/kg		8260B	05/18/15	21
Trichloroethene	79-01-6	U	.0058	0.011	.021	mg/kg		8260B	05/18/15	21
Trichlorofluoromethane	75-69-4	U	.008	0.053	.105	mg/kg		8260B	05/18/15	21
1,2,3-Trichloropropane	96-18-4	U	.016	0.021	.0525	mg/kg		8260B	05/18/15	21
1,2,4-Trimethylbenzene	95-63-6	1.3	.0044	0.011	.021	mg/kg		8260B	05/18/15	21
1,3,5-Trimethylbenzene F SQL-I	108-67-8	0.012	.0056	0.011	.021	mg/kg	J	8260B	05/18/15	21
o-Xylene	95-47-6	0.041	.0071	0.011	.021	mg/kg		8260B	05/18/15	21
m&p-Xylene	1330-20-7	0.044	.015	0.021	.042	mg/kg		8260B	05/18/15	21
Vinyl chloride	75-01-4	U	.0061	0.011	.021	mg/kg		8260B	05/18/15	21
Surrogate Recovery										
Toluene-d8	2037-26-5	109.				% Rec.		8260B	05/18/15	1
Dibromofluoromethane	1868-53-7	106.				% Rec.		8260B	05/18/15	1
4-Bromofluorobenzene	460-00-4	92.8				% Rec.		8260B	05/18/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-03

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W03-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	22.	.44	1.0	2.05	mg/kg		8015D/G	05/12/15	20.5
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	95.8				% Rec.		8015D/G	05/12/15	1
Volatile Organics										
Acetone	67-64-1	U	.19	0.48	.9625	mg/kg		8260B	05/18/15	19.25
Benzene F SQL-I	71-43-2	0.0076	.0052	0.0096	.01925	mg/kg	J	8260B	05/18/15	19.25
Bromobenzene	108-86-1	U	.0055	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Bromochloromethane	74-97-5	U	.0075	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Bromodichloromethane	75-27-4	U	.0049	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Bromoform	75-25-2	U	.0082	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Bromomethane	74-83-9	U	.026	0.048	.09625	mg/kg		8260B	05/18/15	19.25
n-Butylbenzene	104-51-8	0.18	.005	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
sec-Butylbenzene	135-98-8	0.13	.0039	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
tert-Butylbenzene	98-06-6	U	.004	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Carbon Disulfide	75-15-0	U	.0054	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Carbon tetrachloride	56-23-5	U	.0063	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Chlorobenzene	108-90-7	U	.0041	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Chlorodibromomethane	124-48-1	U	.0072	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Chloroethane	75-00-3	U	.018	0.048	.09625	mg/kg		8260B	05/18/15	19.25
Chloroform	67-66-3	U	.0044	0.048	.09625	mg/kg		8260B	05/18/15	19.25
Chloromethane	74-87-3	U	.0072	0.0096	.048125	mg/kg		8260B	05/18/15	19.25
2-Chlorotoluene	95-49-8	U	.0058	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
4-Chlorotoluene	106-43-4	U	.0046	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,2-Dibromo-3-Chloropropane	96-12-8	U	.02	0.048	.09625	mg/kg		8260B	05/18/15	19.25
1,2-Dibromoethane	106-93-4	U	.0066	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Dibromomethane	74-95-3	U	.0074	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,2-Dichlorobenzene	95-50-1	U	.0059	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,3-Dichlorobenzene	541-73-1	U	.0046	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,4-Dichlorobenzene	106-46-7	U	.0044	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Dichlorodifluoromethane	75-71-8	U	.014	0.048	.09625	mg/kg		8260B	05/18/15	19.25
1,1-Dichloroethane	75-34-3	U	.0038	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,2-Dichloroethane	107-06-2	U	.0051	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1-Dichloroethene	75-35-4	U	.0058	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
cis-1,2-Dichloroethene	156-59-2	U	.0045	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
trans-1,2-Dichloroethene	156-60-5	U	.0051	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,2-Dichloropropane	78-87-5	U	.0069	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1-Dichloropropene	563-58-6	U	.0061	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,3-Dichloropropane	142-28-9	U	.004	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
cis-1,3-Dichloropropene	10061-01-5	U	.005	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
trans-1,3-Dichloropropene	10061-02-6	U	.0051	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
2,2-Dichloropropane	594-20-7	U	.0054	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Ethylbenzene	100-41-4	0.11	.0057	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Hexachloro-1,3-butadiene	87-68-3	U	.0066	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
2-Hexanone	591-78-6	U	.073	0.096	.1925	mg/kg		8260B	05/18/15	19.25
Isopropylbenzene	98-82-8	0.079	.0047	0.0096	.01925	mg/kg		8260B	05/18/15	19.25

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-03

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W03-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/05/15 13:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	0.037	.0039	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
2-Butanone (MEK) F SQL-I	78-93-3	0.13	.09	0.096	.1925	mg/kg	J	8260B	05/18/15	19.25
Methylene Chloride	75-09-2	U	.019	0.048	.09625	mg/kg		8260B	05/18/15	19.25
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.036	0.096	.1925	mg/kg		8260B	05/18/15	19.25
Methyl tert-butyl ether	1634-04-4	U	.0041	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Naphthalene J CCAL-L	91-20-3	0.42	.019	0.048	.09625	mg/kg		8260B	05/18/15	19.25
n-Propylbenzene	103-65-1	0.16	.004	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Styrene	100-42-5	U	.0045	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1,1,2-Tetrachloroethane	630-20-6	U	.0051	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1,2,2-Tetrachloroethane	79-34-5	U	.007	0.014	.01925	mg/kg		8260B	05/18/15	19.25
Tetrachloroethene	127-18-4	U	.0053	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Toluene	108-88-3	U	.0084	0.048	.09625	mg/kg		8260B	05/18/15	19.25
1,2,3-Trichlorobenzene U J CCAL-L	87-61-6	U	.0059	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,2,4-Trichlorobenzene	120-82-1	U	.0075	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1,1-Trichloroethane	71-55-6	U	.0055	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1,2-Trichloroethane	79-00-5	U	.0053	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Trichloroethene	79-01-6	U	.0054	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Trichlorofluoromethane	75-69-4	U	.0074	0.048	.09625	mg/kg		8260B	05/18/15	19.25
1,2,3-Trichloropropane	96-18-4	U	.014	0.019	.048125	mg/kg		8260B	05/18/15	19.25
1,2,4-Trimethylbenzene	95-63-6	0.090	.0041	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,3,5-Trimethylbenzene	108-67-8	U	.0051	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
o-Xylene	95-47-6	U	.0065	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
m&p-Xylene	1330-20-7	U	.014	0.019	.0385	mg/kg		8260B	05/18/15	19.25
Vinyl chloride	75-01-4	U	.0056	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	05/18/15	1
Dibromofluoromethane	1868-53-7	106.				% Rec.		8260B	05/18/15	1
4-Bromofluorobenzene	460-00-4	102.				% Rec.		8260B	05/18/15	1

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

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-04

Site ID :

Project # : 23446543.00554A

Date Received : May 08, 2015
Description : Holloman AFB

Sample ID : TU503-EX01-W04-09-N

Collected By : Jon Mallonee
Collection Date : 05/05/15 14:05

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	100	1.8	4.2	8.3	mg/kg		8015D/G	05/12/15	83
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	99.0				% Rec.		8015D/G	05/12/15	1
Volatile Organics										
Acetone	67-64-1	U	.2	0.49	.975	mg/kg		8260B	05/18/15	19.5
Benzene	71-43-2	U	.0053	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Bromobenzene	108-86-1	U	.0055	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Bromochloromethane	74-97-5	U	.0076	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Bromodichloromethane	75-27-4	U	.005	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Bromoform	75-25-2	U	.0083	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Bromomethane	74-83-9	U	.026	0.049	.0975	mg/kg		8260B	05/18/15	19.5
n-Butylbenzene	104-51-8	0.14	.005	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
sec-Butylbenzene	135-98-8	0.070	.0039	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
tert-Butylbenzene F SQL-I	98-06-6	0.010	.004	0.0098	.0195	mg/kg	J	8260B	05/18/15	19.5
Carbon Disulfide	75-15-0	0.086	.0055	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Carbon tetrachloride	56-23-5	U	.0064	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Chlorobenzene	108-90-7	U	.0041	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Chlorodibromomethane	124-48-1	U	.0073	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Chloroethane	75-00-3	U	.018	0.049	.0975	mg/kg		8260B	05/18/15	19.5
Chloroform	67-66-3	U	.0045	0.049	.0975	mg/kg		8260B	05/18/15	19.5
Chloromethane	74-87-3	U	.0073	0.0098	.04875	mg/kg		8260B	05/18/15	19.5
2-Chlorotoluene	95-49-8	U	.0059	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
4-Chlorotoluene	106-43-4	U	.0047	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,2-Dibromo-3-Chloropropane	96-12-8	U	.02	0.049	.0975	mg/kg		8260B	05/18/15	19.5
1,2-Dibromoethane	106-93-4	U	.0067	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Dibromomethane	74-95-3	U	.0074	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,2-Dichlorobenzene	95-50-1	U	.0059	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,3-Dichlorobenzene	541-73-1	U	.0047	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,4-Dichlorobenzene	106-46-7	U	.0044	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Dichlorodifluoromethane	75-71-8	U	.014	0.049	.0975	mg/kg		8260B	05/18/15	19.5
1,1-Dichloroethane	75-34-3	U	.0039	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,2-Dichloroethane	107-06-2	U	.0052	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,1-Dichloroethene	75-35-4	U	.0059	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
cis-1,2-Dichloroethene	156-59-2	U	.0046	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
trans-1,2-Dichloroethene	156-60-5	U	.0051	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,2-Dichloropropane	78-87-5	U	.007	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,1-Dichloropropene	563-58-6	U	.0062	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,3-Dichloropropane	142-28-9	U	.004	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
cis-1,3-Dichloropropene	10061-01-5	U	.0051	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
trans-1,3-Dichloropropene	10061-02-6	U	.0052	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
2,2-Dichloropropane	594-20-7	U	.0054	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Ethylbenzene	100-41-4	0.026	.0058	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Hexachloro-1,3-butadiene	87-68-3	U	.0067	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
2-Hexanone	591-78-6	U	.074	0.098	.195	mg/kg		8260B	05/18/15	19.5
Isopropylbenzene	98-82-8	0.030	.0047	0.0098	.0195	mg/kg		8260B	05/18/15	19.5

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-04

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W04-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/05/15 14:05

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	0.16	.004	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
2-Butanone (MEK)	78-93-3	0.33	.091	0.098	.195	mg/kg		8260B	05/18/15	19.5
Methylene Chloride	75-09-2	U	.02	0.049	.0975	mg/kg		8260B	05/18/15	19.5
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.037	0.098	.195	mg/kg		8260B	05/18/15	19.5
Methyl tert-butyl ether	1634-04-4	U	.0041	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Naphthalene DNR	~~91-20-3~~	~~2.0~~	~~.02~~	~~0.049~~	~~.0975~~	~~mg/kg~~		~~8260B~~	~~05/18/15~~	~~19.5~~
n-Propylbenzene	103-65-1	0.051	.004	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Styrene	100-42-5	U	.0046	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,1,1,2-Tetrachloroethane	630-20-6	U	.0051	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,1,2,2-Tetrachloroethane	79-34-5	U	.0071	0.015	.0195	mg/kg		8260B	05/18/15	19.5
Tetrachloroethene	127-18-4	U	.0054	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Toluene	108-88-3	U	.0085	0.049	.0975	mg/kg		8260B	05/18/15	19.5
1,2,3-Trichlorobenzene US CC AL-L	87-61-6	U	.006	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,2,4-Trichlorobenzene	120-82-1	U	.0076	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,1,1-Trichloroethane	71-55-6	U	.00558	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,1,2-Trichloroethane	79-00-5	U	.0054	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Trichloroethene	79-01-6	U	.0054	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Trichlorofluoromethane	75-69-4	U	.0074	0.049	.0975	mg/kg		8260B	05/18/15	19.5
1,2,3-Trichloropropane	96-18-4	U	.014	0.020	.04875	mg/kg		8260B	05/18/15	19.5
1,2,4-Trimethylbenzene	95-63-6	0.25	.0041	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
1,3,5-Trimethylbenzene	108-67-8	0.78	.0052	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
o-Xylene	95-47-6	0.030	.0066	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
m&p-Xylene	1330-20-7	U	.014	0.020	.039	mg/kg		8260B	05/18/15	19.5
Vinyl chloride	75-01-4	U	.0057	0.0098	.0195	mg/kg		8260B	05/18/15	19.5
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	05/18/15	1
Dibromofluoromethane	1868-53-7	106.				% Rec.		8260B	05/18/15	1
4-Bromofluorobenzene	460-00-4	70.9				% Rec.	J2	8260B	05/18/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-05

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-F02-13-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/05/15 16:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	.45	1.0	2.075	mg/kg		8015D/G	05/14/15	20.75
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	101.				% Rec.		8015D/G	05/14/15	1
Volatile Organics										
Acetone	67-64-1	U	.22	0.55	1.1	mg/kg		8260B	05/18/15	22
Benzene	71-43-2	U	.0059	0.011	.022	mg/kg		8260B	05/18/15	22
Bromobenzene	108-86-1	U	.0062	0.011	.022	mg/kg		8260B	05/18/15	22
Bromochloromethane	74-97-5	U	.0086	0.011	.022	mg/kg		8260B	05/18/15	22
Bromodichloromethane	75-27-4	U	.0056	0.011	.022	mg/kg		8260B	05/18/15	22
Bromoform	75-25-2	U	.0093	0.011	.022	mg/kg		8260B	05/18/15	22
Bromomethane	74-83-9	U	.029	0.055	.11	mg/kg		8260B	05/18/15	22
n-Butylbenzene	104-51-8	U	.0057	0.011	.022	mg/kg		8260B	05/18/15	22
sec-Butylbenzene	135-98-8	U	.0044	0.011	.022	mg/kg		8260B	05/18/15	22
tert-Butylbenzene	98-06-6	U	.0045	0.011	.022	mg/kg		8260B	05/18/15	22
Carbon Disulfide	75-15-0	U	.0062	0.011	.022	mg/kg		8260B	05/18/15	22
Carbon tetrachloride	56-23-5	U	.0072	0.011	.022	mg/kg		8260B	05/18/15	22
Chlorobenzene	108-90-7	U	.0047	0.011	.022	mg/kg		8260B	05/18/15	22
Chlorodibromomethane	124-48-1	U	.0082	0.011	.022	mg/kg		8260B	05/18/15	22
Chloroethane	75-00-3	U	.021	0.055	.11	mg/kg		8260B	05/18/15	22
Chloroform	67-66-3	U	.005	0.055	.11	mg/kg		8260B	05/18/15	22
Chloromethane	74-87-3	U	.0082	0.011	.055	mg/kg		8260B	05/18/15	22
2-Chlorotoluene	95-49-8	U	.0066	0.011	.022	mg/kg		8260B	05/18/15	22
4-Chlorotoluene	106-43-4	U	.0053	0.011	.022	mg/kg		8260B	05/18/15	22
1,2-Dibromo-3-Chloropropane	96-12-8	U	.023	0.055	.11	mg/kg		8260B	05/18/15	22
1,2-Dibromoethane	106-93-4	U	.0075	0.011	.022	mg/kg		8260B	05/18/15	22
Dibromomethane	74-95-3	U	.0084	0.011	.022	mg/kg		8260B	05/18/15	22
1,2-Dichlorobenzene	95-50-1	U	.0067	0.011	.022	mg/kg		8260B	05/18/15	22
1,3-Dichlorobenzene	541-73-1	U	.0052	0.011	.022	mg/kg		8260B	05/18/15	22
1,4-Dichlorobenzene	106-46-7	U	.005	0.011	.022	mg/kg		8260B	05/18/15	22
Dichlorodifluoromethane	75-71-8	U	.016	0.055	.11	mg/kg		8260B	05/18/15	22
1,1-Dichloroethane	75-34-3	U	.0044	0.011	.022	mg/kg		8260B	05/18/15	22
1,2-Dichloroethane	107-06-2	U	.0058	0.011	.022	mg/kg		8260B	05/18/15	22
1,1-Dichloroethene	75-35-4	U	.0067	0.011	.022	mg/kg		8260B	05/18/15	22
cis-1,2-Dichloroethene	156-59-2	U	.0052	0.011	.022	mg/kg		8260B	05/18/15	22
trans-1,2-Dichloroethene	156-60-5	U	.0058	0.011	.022	mg/kg		8260B	05/18/15	22
1,2-Dichloropropane	78-87-5	U	.0079	0.011	.022	mg/kg		8260B	05/18/15	22
1,1-Dichloropropene	563-58-6	U	.007	0.011	.022	mg/kg		8260B	05/18/15	22
1,3-Dichloropropane	142-28-9	U	.0046	0.011	.022	mg/kg		8260B	05/18/15	22
cis-1,3-Dichloropropene	10061-01-5	U	.0058	0.011	.022	mg/kg		8260B	05/18/15	22
trans-1,3-Dichloropropene	10061-02-6	U	.0059	0.011	.022	mg/kg		8260B	05/18/15	22
2,2-Dichloropropane	594-20-7	U	.0061	0.011	.022	mg/kg		8260B	05/18/15	22
Ethylbenzene	100-41-4	U	.0065	0.011	.022	mg/kg		8260B	05/18/15	22
Hexachloro-1,3-butadiene	87-68-3	U	.0075	0.011	.022	mg/kg		8260B	05/18/15	22
2-Hexanone	591-78-6	U	.084	0.11	.22	mg/kg		8260B	05/18/15	22
Isopropylbenzene	98-82-8	U	.0053	0.011	.022	mg/kg		8260B	05/18/15	22

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-05

Site ID :

Project # : 23446543.00554A

Date Received : May 08, 2015
Description : Holloman AFB

Sample ID : TU503-EX01-F02-13-N

Collected By : Jon Mallonee
Collection Date : 05/05/15 16:25

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	U	.0045	0.011	.022	mg/kg		8260B	05/18/15	22
2-Butanone (MEK) F SQL-I	78-93-3	0.12	.1	0.11	.22	mg/kg	J	8260B	05/18/15	22
Methylene Chloride	75-09-2	U	.022	0.055	.11	mg/kg		8260B	05/18/15	22
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.041	0.11	.22	mg/kg		8260B	05/18/15	22
Methyl tert-butyl ether	1634-04-4	U	.0047	0.011	.022	mg/kg		8260B	05/18/15	22
Naphthalene ~~F SQL-I~~ DNR	~~91-20-3~~	~~0.027~~	~~.022~~	~~0.055~~	~~.11~~	~~mg/kg~~	~~J~~	~~8260B~~	~~05/18/15~~	~~22~~
n-Propylbenzene	103-65-1	U	.0045	0.011	.022	mg/kg		8260B	05/18/15	22
Styrene	100-42-5	U	.0051	0.011	.022	mg/kg		8260B	05/18/15	22
1,1,1,2-Tetrachloroethane	630-20-6	U	.0058	0.011	.022	mg/kg		8260B	05/18/15	22
1,1,2,2-Tetrachloroethane	79-34-5	U	.008	0.017	.022	mg/kg		8260B	05/18/15	22
Tetrachloroethene	127-18-4	U	.0061	0.011	.022	mg/kg		8260B	05/18/15	22
Toluene	108-88-3	U	.0095	0.055	.11	mg/kg		8260B	05/18/15	22
1,2,3-Trichlorobenzene USCCAL-L	87-61-6	U	.0067	0.011	.022	mg/kg		8260B	05/18/15	22
1,2,4-Trichlorobenzene	120-82-1	U	.0085	0.011	.022	mg/kg		8260B	05/18/15	22
1,1,1-Trichloroethane	71-55-6	U	.00629	0.011	.022	mg/kg		8260B	05/18/15	22
1,1,2-Trichloroethane	79-00-5	U	.0061	0.011	.022	mg/kg		8260B	05/18/15	22
Trichloroethene	79-01-6	U	.0061	0.011	.022	mg/kg		8260B	05/18/15	22
Trichlorofluoromethane	75-69-4	U	.0084	0.055	.11	mg/kg		8260B	05/18/15	22
1,2,3-Trichloropropane	96-18-4	U	.016	0.022	.055	mg/kg		8260B	05/18/15	22
1,2,4-Trimethylbenzene	95-63-6	U	.0046	0.011	.022	mg/kg		8260B	05/18/15	22
1,3,5-Trimethylbenzene	108-67-8	U	.0058	0.011	.022	mg/kg		8260B	05/18/15	22
o-Xylene	95-47-6	U	.0075	0.011	.022	mg/kg		8260B	05/18/15	22
m&p-Xylene	1330-20-7	U	.016	0.022	.044	mg/kg		8260B	05/18/15	22
Vinyl chloride	75-01-4	U	.0064	0.011	.022	mg/kg		8260B	05/18/15	22
Surrogate Recovery										
Toluene-d8	2037-26-5	107.				% Rec.		8260B	05/18/15	1
Dibromofluoromethane	1868-53-7	107.				% Rec.		8260B	05/18/15	1
4-Bromofluorobenzene	460-00-4	107.				% Rec.		8260B	05/18/15	1

U = Not Detected at the LOD
Note:
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DNR = Do Not report

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-06

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W05-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	27.	1.8	4.1	8.2	mg/kg		8015D/G	05/12/15	82
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	99.3				% Rec.		8015D/G	05/12/15	1
Volatile Organics										
Acetone	67-64-1	U	.18	0.46	.925	mg/kg		8260B	05/18/15	18.5
Benzene	71-43-2	U	.005	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Bromobenzene	108-86-1	U	.0052	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Bromochloromethane	74-97-5	U	.0072	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Bromodichloromethane	75-27-4	U	.0047	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Bromoform	75-25-2	U	.0078	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Bromomethane	74-83-9	U	.025	0.046	.0925	mg/kg		8260B	05/18/15	18.5
n-Butylbenzene	104-51-8	U	.0048	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
sec-Butylbenzene F SQL-I	135-98-8	0.0064	.0037	0.0093	.0185	mg/kg	J	8260B	05/18/15	18.5
tert-Butylbenzene	98-06-6	U	.0038	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Carbon Disulfide	75-15-0	U	.0052	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Carbon tetrachloride	56-23-5	U	.0061	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Chlorobenzene	108-90-7	U	.0039	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Chlorodibromomethane	124-48-1	U	.0069	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Chloroethane	75-00-3	U	.018	0.046	.0925	mg/kg		8260B	05/18/15	18.5
Chloroform	67-66-3	U	.0042	0.046	.0925	mg/kg		8260B	05/18/15	18.5
Chloromethane	74-87-3	U	.0069	0.0093	.04625	mg/kg		8260B	05/18/15	18.5
2-Chlorotoluene	95-49-8	U	.0056	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
4-Chlorotoluene	106-43-4	U	.0044	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,2-Dibromo-3-Chloropropane	96-12-8	U	.019	0.046	.0925	mg/kg		8260B	05/18/15	18.5
1,2-Dibromoethane	106-93-4	U	.0063	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Dibromomethane	74-95-3	U	.0071	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,2-Dichlorobenzene	95-50-1	U	.0056	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,3-Dichlorobenzene	541-73-1	U	.0044	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,4-Dichlorobenzene	106-46-7	U	.0042	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Dichlorodifluoromethane	75-71-8	U	.013	0.046	.0925	mg/kg		8260B	05/18/15	18.5
1,1-Dichloroethane	75-34-3	U	.0037	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,2-Dichloroethane	107-06-2	U	.0049	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,1-Dichloroethene	75-35-4	U	.0056	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
cis-1,2-Dichloroethene	156-59-2	U	.0043	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
trans-1,2-Dichloroethene	156-60-5	U	.0049	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,2-Dichloropropane	78-87-5	U	.0066	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,1-Dichloropropene	563-58-6	U	.0059	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,3-Dichloropropane	142-28-9	U	.0038	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
cis-1,3-Dichloropropene	10061-01-5	U	.0048	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
trans-1,3-Dichloropropene	10061-02-6	U	.0049	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
2,2-Dichloropropane	594-20-7	U	.0052	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Ethylbenzene	100-41-4	U	.0055	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Hexachloro-1,3-butadiene	87-68-3	U	.0063	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
2-Hexanone	591-78-6	U	.07	0.093	.185	mg/kg		8260B	05/18/15	18.5
Isopropylbenzene	98-82-8	U	.0045	0.0093	.0185	mg/kg		8260B	05/18/15	18.5

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-06

Site ID :

Project # : 23446543.00554A

Date Received : May 08, 2015
Description : Holloman AFB

Sample ID : TU503-EX01-W05-09-N

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	U	.0038	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
2-Butanone (MEK) F SQL-L	78-93-3	0.12	.086	0.093	.185	mg/kg	J	8260B	05/18/15	18.5
Methylene Chloride	75-09-2	U	.018	0.046	.0925	mg/kg		8260B	05/18/15	18.5
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.035	0.093	.185	mg/kg		8260B	05/18/15	18.5
Methyl tert-butyl ether	1634-04-4	U	.0039	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Naphthalene DNR	~~91-20-3~~	~~U~~	~~.018~~	~~0.046~~	~~.0925~~	~~mg/kg~~		~~8260B~~	~~05/18/15~~	~~18.5~~
n-Propylbenzene	103-65-1	U	.0038	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Styrene	100-42-5	U	.0043	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,1,1,2-Tetrachloroethane	630-20-6	U	.0049	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,1,2,2-Tetrachloroethane	79-34-5	U	.0068	0.014	.0185	mg/kg		8260B	05/18/15	18.5
Tetrachloroethene	127-18-4	U	.0051	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Toluene	108-88-3	U	.008	0.046	.0925	mg/kg		8260B	05/18/15	18.5
1,2,3-Trichlorobenzene US CCAL-L	87-61-6	U	.0057	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,2,4-Trichlorobenzene	120-82-1	U	.0072	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,1,1-Trichloroethane	71-55-6	U	.00529	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,1,2-Trichloroethane	79-00-5	U	.0051	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Trichloroethene	79-01-6	U	.0052	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Trichlorofluoromethane	75-69-4	U	.0071	0.046	.0925	mg/kg		8260B	05/18/15	18.5
1,2,3-Trichloropropane	96-18-4	U	.014	0.019	.04625	mg/kg		8260B	05/18/15	18.5
1,2,4-Trimethylbenzene	95-63-6	U	.0039	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
1,3,5-Trimethylbenzene	108-67-8	U	.0049	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
o-Xylene	95-47-6	U	.0063	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
m&p-Xylene	1330-20-7	U	.013	0.019	.037	mg/kg		8260B	05/18/15	18.5
Vinyl chloride	75-01-4	U	.0054	0.0093	.0185	mg/kg		8260B	05/18/15	18.5
Surrogate Recovery										
Toluene-d8	2037-26-5	104.				% Rec.		8260B	05/18/15	1
Dibromofluoromethane	1868-53-7	106.				% Rec.		8260B	05/18/15	1
4-Bromofluorobenzene	460-00-4	74.5				% Rec.		8260B	05/18/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-07

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W06-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	3.9	.49	1.1	2.275	mg/kg		8015D/G	05/14/15	22.75
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	101.				% Rec.		8015D/G	05/14/15	1
Volatile Organics										
Acetone	67-64-1	U	.2	0.49	.9875	mg/kg		8260B	05/18/15	19.75
Benzene	71-43-2	U	.0053	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Bromobenzene	108-86-1	U	.0056	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Bromochloromethane	74-97-5	U	.0077	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Bromodichloromethane	75-27-4	U	.005	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Bromoform	75-25-2	U	.0084	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Bromomethane	74-83-9	U	.026	0.049	.09875	mg/kg		8260B	05/18/15	19.75
n-Butylbenzene	104-51-8	U	.0051	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
sec-Butylbenzene F SQL-J	135-98-8	0.0084	.004	0.0099	.01975	mg/kg	J	8260B	05/18/15	19.75
tert-Butylbenzene	98-06-6	U	.0041	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Carbon Disulfide	75-15-0	U	.0055	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Carbon tetrachloride	56-23-5	U	.0065	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Chlorobenzene	108-90-7	U	.0042	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Chlorodibromomethane	124-48-1	U	.0074	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Chloroethane	75-00-3	U	.019	0.049	.09875	mg/kg		8260B	05/18/15	19.75
Chloroform	67-66-3	U	.0045	0.049	.09875	mg/kg		8260B	05/18/15	19.75
Chloromethane	74-87-3	U	.0074	0.0099	.049375	mg/kg		8260B	05/18/15	19.75
2-Chlorotoluene	95-49-8	U	.0059	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
4-Chlorotoluene	106-43-4	U	.0047	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,2-Dibromo-3-Chloropropane	96-12-8	U	.021	0.049	.09875	mg/kg		8260B	05/18/15	19.75
1,2-Dibromoethane	106-93-4	U	.0068	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Dibromomethane	74-95-3	U	.0075	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,2-Dichlorobenzene	95-50-1	U	.006	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,3-Dichlorobenzene	541-73-1	U	.0047	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,4-Dichlorobenzene	106-46-7	U	.0045	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Dichlorodifluoromethane	75-71-8	U	.014	0.049	.09875	mg/kg		8260B	05/18/15	19.75
1,1-Dichloroethane	75-34-3	U	.0039	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,2-Dichloroethane	107-06-2	U	.0052	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,1-Dichloroethene	75-35-4	U	.006	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
cis-1,2-Dichloroethene	156-59-2	U	.0046	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
trans-1,2-Dichloroethene	156-60-5	U	.0052	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,2-Dichloropropane	78-87-5	U	.0071	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,1-Dichloropropene	563-58-6	U	.0063	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,3-Dichloropropane	142-28-9	U	.0041	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
cis-1,3-Dichloropropene	10061-01-5	U	.0052	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
trans-1,3-Dichloropropene	10061-02-6	U	.0053	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
2,2-Dichloropropane	594-20-7	U	.0055	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Ethylbenzene	100-41-4	U	.0059	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Hexachloro-1,3-butadiene	87-68-3	U	.0068	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
2-Hexanone	591-78-6	U	.075	0.099	.1975	mg/kg		8260B	05/18/15	19.75
Isopropylbenzene	98-82-8	U	.0048	0.0099	.01975	mg/kg		8260B	05/18/15	19.75

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-07

Site ID :

Project # : 23446543.00554A

Date Received : May 08, 2015
Description : Holloman AFB

Sample ID : TU503-EX01-W06-09-N

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:45

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	U	.004	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
2-Butanone (MEK)	78-93-3	U	.092	0.099	.1975	mg/kg		8260B	05/18/15	19.75
Methylene Chloride	75-09-2	U	.02	0.049	.09875	mg/kg		8260B	05/18/15	19.75
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.037	0.099	.1975	mg/kg		8260B	05/18/15	19.75
Methyl tert-butyl ether	1634-04-4	U	.0042	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Naphthalene DNR	~~91-20-3~~	~~U~~	~~.02~~	~~0.049~~	~~.09875~~	~~mg/kg~~		~~8260B~~	~~05/18/15~~	~~19.75~~
n-Propylbenzene	103-65-1	U	.0041	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Styrene	100-42-5	U	.0046	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,1,1,2-Tetrachloroethane	630-20-6	U	.0052	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,1,2,2-Tetrachloroethane	79-34-5	U	.0072	0.015	.01975	mg/kg		8260B	05/18/15	19.75
Tetrachloroethene	127-18-4	U	.0054	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Toluene	108-88-3	U	.0086	0.049	.09875	mg/kg		8260B	05/18/15	19.75
1,2,3-Trichlorobenzene US CCAL-L	87-61-6	U	.006	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,2,4-Trichlorobenzene	120-82-1	U	.0077	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,1,1-Trichloroethane	71-55-6	U	.00565	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,1,2-Trichloroethane	79-00-5	U	.0055	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Trichloroethene	79-01-6	U	.0055	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Trichlorofluoromethane	75-69-4	U	.0075	0.049	.09875	mg/kg		8260B	05/18/15	19.75
1,2,3-Trichloropropane	96-18-4	U	.015	0.020	.049375	mg/kg		8260B	05/18/15	19.75
1,2,4-Trimethylbenzene	95-63-6	U	.0042	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
1,3,5-Trimethylbenzene	108-67-8	U	.0052	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
o-Xylene	95-47-6	U	.0067	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
m&p-Xylene	1330-20-7	U	.014	0.020	.0395	mg/kg		8260B	05/18/15	19.75
Vinyl chloride	75-01-4	U	.0057	0.0099	.01975	mg/kg		8260B	05/18/15	19.75
Surrogate Recovery										
Toluene-d8	2037-26-5	105.				% Rec.		8260B	05/18/15	1
Dibromofluoromethane	1868-53-7	105.				% Rec.		8260B	05/18/15	1
4-Bromofluorobenzene	460-00-4	101.				% Rec.		8260B	05/18/15	1

U = Not Detected at the LOD
Note:
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DNR = Do Not Report

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-08

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W07-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	89.	1.9	4.5	8.9	mg/kg		8015D/G	05/12/15	89
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	99.1				% Rec.		8015D/G	05/12/15	1
Volatile Organics										
Acetone	67-64-1	U	.22	0.56	1.125	mg/kg		8260B	05/18/15	22.5
Benzene	71-43-2	U	.0061	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Bromobenzene	108-86-1	U	.0064	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Bromochloromethane	74-97-5	U	.0088	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Bromodichloromethane	75-27-4	U	.0057	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Bromoform	75-25-2	U	.0095	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Bromomethane	74-83-9	U	.03	0.056	.1125	mg/kg		8260B	05/18/15	22.5
n-Butylbenzene	104-51-8	0.093	.0058	0.011	.0225	mg/kg		8260B	05/18/15	22.5
sec-Butylbenzene	135-98-8	0.20	.0045	0.011	.0225	mg/kg		8260B	05/18/15	22.5
tert-Butylbenzene F SQL-I	98-06-6	0.0051	.0046	0.011	.0225	mg/kg	J	8260B	05/18/15	22.5
Carbon Disulfide	75-15-0	U	.0063	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Carbon tetrachloride	56-23-5	U	.0074	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Chlorobenzene	108-90-7	U	.0048	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Chlorodibromomethane	124-48-1	U	.0084	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Chloroethane	75-00-3	U	.021	0.056	.1125	mg/kg		8260B	05/18/15	22.5
Chloroform	67-66-3	U	.0052	0.056	.1125	mg/kg		8260B	05/18/15	22.5
Chloromethane	74-87-3	U	.0084	0.011	.05625	mg/kg		8260B	05/18/15	22.5
2-Chlorotoluene	95-49-8	U	.0068	0.011	.0225	mg/kg		8260B	05/18/15	22.5
4-Chlorotoluene	106-43-4	U	.0054	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,2-Dibromo-3-Chloropropane	96-12-8	U	.024	0.056	.1125	mg/kg		8260B	05/18/15	22.5
1,2-Dibromoethane	106-93-4	U	.0077	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Dibromomethane	74-95-3	U	.0086	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,2-Dichlorobenzene	95-50-1	U	.0069	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,3-Dichlorobenzene	541-73-1	U	.0054	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,4-Dichlorobenzene	106-46-7	U	.0051	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Dichlorodifluoromethane	75-71-8	U	.016	0.056	.1125	mg/kg		8260B	05/18/15	22.5
1,1-Dichloroethane	75-34-3	U	.0045	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,2-Dichloroethane	107-06-2	U	.006	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,1-Dichloroethene	75-35-4	U	.0068	0.011	.0225	mg/kg		8260B	05/18/15	22.5
cis-1,2-Dichloroethene	156-59-2	U	.0053	0.011	.0225	mg/kg		8260B	05/18/15	22.5
trans-1,2-Dichloroethene	156-60-5	U	.0059	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,2-Dichloropropane	78-87-5	U	.008	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,1-Dichloropropene	563-58-6	U	.0071	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,3-Dichloropropane	142-28-9	U	.0046	0.011	.0225	mg/kg		8260B	05/18/15	22.5
cis-1,3-Dichloropropene	10061-01-5	U	.0059	0.011	.0225	mg/kg		8260B	05/18/15	22.5
trans-1,3-Dichloropropene	10061-02-6	U	.006	0.011	.0225	mg/kg		8260B	05/18/15	22.5
2,2-Dichloropropane	594-20-7	U	.0063	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Ethylbenzene	100-41-4	U	.0067	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Hexachloro-1,3-butadiene	87-68-3	U	.0077	0.011	.0225	mg/kg		8260B	05/18/15	22.5
2-Hexanone	591-78-6	U	.086	0.11	.225	mg/kg		8260B	05/18/15	22.5
Isopropylbenzene F SQL-I	98-82-8	0.014	.0055	0.011	.0225	mg/kg	J	8260B	05/18/15	22.5

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-08

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W07-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/06/15 09:55

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	U	.0046	0.011	.0225	mg/kg		8260B	05/18/15	22.5
2-Butanone (MEK) F SQL-I	78-93-3	0.11	.1	0.11	.225	mg/kg	J	8260B	05/18/15	22.5
Methylene Chloride	75-09-2	U	.022	0.056	.1125	mg/kg		8260B	05/18/15	22.5
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.042	0.11	.225	mg/kg		8260B	05/18/15	22.5
Methyl tert-butyl ether	1634-04-4	U	.0048	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Naphthalene DNR	~~91-20-3~~	~~U~~	~~.022~~	~~0.056~~	~~.1125~~	~~mg/kg~~		~~8260B~~	~~05/18/15~~	~~22.5~~
n-Propylbenzene	103-65-1	U	.0046	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Styrene	100-42-5	U	.0053	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,1,1,2-Tetrachloroethane	630-20-6	U	.0059	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,1,2,2-Tetrachloroethane	79-34-5	U	.0082	0.017	.0225	mg/kg		8260B	05/18/15	22.5
Tetrachloroethene	127-18-4	U	.0062	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Toluene	108-88-3	U	.0098	0.056	.1125	mg/kg		8260B	05/18/15	22.5
1,2,3-Trichlorobenzene US CCAL-L	87-61-6	U	.0069	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,2,4-Trichlorobenzene	120-82-1	U	.0087	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,1,1-Trichloroethane	71-55-6	U	.00644	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,1,2-Trichloroethane	79-00-5	U	.0062	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Trichloroethene	79-01-6	U	.0063	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Trichlorofluoromethane	75-69-4	U	.0086	0.056	.1125	mg/kg		8260B	05/18/15	22.5
1,2,3-Trichloropropane	96-18-4	U	.017	0.023	.05625	mg/kg		8260B	05/18/15	22.5
1,2,4-Trimethylbenzene	95-63-6	U	.0047	0.011	.0225	mg/kg		8260B	05/18/15	22.5
1,3,5-Trimethylbenzene	108-67-8	U	.006	0.011	.0225	mg/kg		8260B	05/18/15	22.5
o-Xylene	95-47-6	U	.0076	0.011	.0225	mg/kg		8260B	05/18/15	22.5
m&p-Xylene	1330-20-7	U	.016	0.023	.045	mg/kg		8260B	05/18/15	22.5
Vinyl chloride	75-01-4	U	.0065	0.011	.0225	mg/kg		8260B	05/18/15	22.5
Surrogate Recovery										
Toluene-d8	2037-26-5	107.				% Rec.		8260B	05/18/15	1
Dibromofluoromethane	1868-53-7	105.				% Rec.		8260B	05/18/15	1
4-Bromofluorobenzene	460-00-4	121.				% Rec.		8260B	05/18/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-09

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W08-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/06/15 10:23

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	.5	1.2	2.3	mg/kg		8015D/G	05/12/15	23
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	100.				% Rec.		8015D/G	05/12/15	1
Volatile Organics										
Acetone	67-64-1	U	.23	0.57	1.1375	mg/kg		8260B	05/18/15	22.75
Benzene	71-43-2	U	.0061	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Bromobenzene	108-86-1	U	.0065	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Bromochloromethane	74-97-5	U	.0089	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Bromodichloromethane	75-27-4	U	.0058	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Bromoform	75-25-2	U	.0096	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Bromomethane	74-83-9	U	.03	0.057	.11375	mg/kg		8260B	05/18/15	22.75
n-Butylbenzene	104-51-8	U	.0059	0.011	.02275	mg/kg		8260B	05/18/15	22.75
sec-Butylbenzene	135-98-8	U	.0046	0.011	.02275	mg/kg		8260B	05/18/15	22.75
tert-Butylbenzene	98-06-6	U	.0047	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Carbon Disulfide	75-15-0	U	.0064	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Carbon tetrachloride	56-23-5	U	.0075	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Chlorobenzene	108-90-7	U	.0048	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Chlorodibromomethane	124-48-1	U	.0085	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Chloroethane	75-00-3	U	.022	0.057	.11375	mg/kg		8260B	05/18/15	22.75
Chloroform	67-66-3	U	.0052	0.057	.11375	mg/kg		8260B	05/18/15	22.75
Chloromethane	74-87-3	U	.0085	0.011	.056875	mg/kg		8260B	05/18/15	22.75
2-Chlorotoluene	95-49-8	U	.0068	0.011	.02275	mg/kg		8260B	05/18/15	22.75
4-Chlorotoluene	106-43-4	U	.0055	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,2-Dibromo-3-Chloropropane	96-12-8	U	.024	0.057	.11375	mg/kg		8260B	05/18/15	22.75
1,2-Dibromoethane	106-93-4	U	.0078	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Dibromomethane	74-95-3	U	.0087	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,2-Dichlorobenzene	95-50-1	U	.0069	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,3-Dichlorobenzene	541-73-1	U	.0054	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,4-Dichlorobenzene	106-46-7	U	.0051	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Dichlorodifluoromethane	75-71-8	U	.016	0.057	.11375	mg/kg		8260B	05/18/15	22.75
1,1-Dichloroethane	75-34-3	U	.0045	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,2-Dichloroethane	107-06-2	U	.006	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,1-Dichloroethene	75-35-4	U	.0069	0.011	.02275	mg/kg		8260B	05/18/15	22.75
cis-1,2-Dichloroethene	156-59-2	U	.0053	0.011	.02275	mg/kg		8260B	05/18/15	22.75
trans-1,2-Dichloroethene	156-60-5	U	.006	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,2-Dichloropropane	78-87-5	U	.0081	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,1-Dichloropropene	563-58-6	U	.0072	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,3-Dichloropropane	142-28-9	U	.0047	0.011	.02275	mg/kg		8260B	05/18/15	22.75
cis-1,3-Dichloropropene	10061-01-5	U	.006	0.011	.02275	mg/kg		8260B	05/18/15	22.75
trans-1,3-Dichloropropene	10061-02-6	U	.0061	0.011	.02275	mg/kg		8260B	05/18/15	22.75
2,2-Dichloropropane	594-20-7	U	.0063	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Ethylbenzene	100-41-4	U	.0068	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Hexachloro-1,3-butadiene	87-68-3	U	.0078	0.011	.02275	mg/kg		8260B	05/18/15	22.75
2-Hexanone	591-78-6	U	.086	0.11	.2275	mg/kg		8260B	05/18/15	22.75
Isopropylbenzene	98-82-8	U	.0055	0.011	.02275	mg/kg		8260B	05/18/15	22.75

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-09

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-W08-09-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/06/15 10:23

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	U	.0046	0.011	.02275	mg/kg		8260B	05/18/15	22.75
2-Butanone (MEK)	78-93-3	U	.11	0.11	.2275	mg/kg		8260B	05/18/15	22.75
Methylene Chloride	75-09-2	U	.023	0.057	.11375	mg/kg		8260B	05/18/15	22.75
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.043	0.11	.2275	mg/kg		8260B	05/18/15	22.75
Methyl tert-butyl ether	1634-04-4	U	.0048	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Naphthalene DNR	~~91-20-3~~	~~U~~	~~.023~~	~~0.057~~	~~.11375~~	~~mg/kg~~		~~8260B~~	~~05/18/15~~	~~22.75~~
n-Propylbenzene	103-65-1	U	.0047	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Styrene	100-42-5	U	.0053	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,1,1,2-Tetrachloroethane	630-20-6	U	.006	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,1,2,2-Tetrachloroethane	79-34-5	U	.0083	0.017	.02275	mg/kg		8260B	05/18/15	22.75
Tetrachloroethene	127-18-4	U	.0063	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Toluene	108-88-3	U	.0099	0.057	.11375	mg/kg		8260B	05/18/15	22.75
1,2,3-Trichlorobenzene UJ CCAL	87-61-6	U	.007	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,2,4-Trichlorobenzene	120-82-1	U	.0088	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,1,1-Trichloroethane	71-55-6	U	.00651	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,1,2-Trichloroethane	79-00-5	U	.0063	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Trichloroethene	79-01-6	U	.0063	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Trichlorofluoromethane	75-69-4	U	.0087	0.057	.11375	mg/kg		8260B	05/18/15	22.75
1,2,3-Trichloropropane	96-18-4	U	.017	0.023	.056875	mg/kg		8260B	05/18/15	22.75
1,2,4-Trimethylbenzene	95-63-6	U	.0048	0.011	.02275	mg/kg		8260B	05/18/15	22.75
1,3,5-Trimethylbenzene	108-67-8	U	.006	0.011	.02275	mg/kg		8260B	05/18/15	22.75
o-Xylene	95-47-6	U	.0077	0.011	.02275	mg/kg		8260B	05/18/15	22.75
m&p-Xylene	1330-20-7	U	.016	0.023	.0455	mg/kg		8260B	05/18/15	22.75
Vinyl chloride	75-01-4	U	.0066	0.011	.02275	mg/kg		8260B	05/18/15	22.75
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	05/18/15	1
Dibromofluoromethane	1868-53-7	104.				% Rec.		8260B	05/18/15	1
4-Bromofluorobenzene	460-00-4	75.9				% Rec.		8260B	05/18/15	1

U = Not Detected at the LOD
Note:
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DNR = Do Not Report

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-10

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-F01-12-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/05/15 10:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	.47	1.1	2.175	mg/kg		8015D/G	05/12/15	21.75
Surrogate Recovery (70-130)										
a,a,a-Trifluorotoluene(FID)	98-08-8	99.7				% Rec.		8015D/G	05/12/15	1
Volatile Organics										
Acetone	67-64-1	U	.19	0.48	.9625	mg/kg	J5	8260B	05/18/15	19.25
Benzene	71-43-2	U	.0052	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Bromobenzene	108-86-1	U	.0055	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Bromochloromethane	74-97-5	U	.0075	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Bromodichloromethane	75-27-4	U	.0049	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Bromoform	75-25-2	U	.0082	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Bromomethane	74-83-9	U	.026	0.048	.09625	mg/kg		8260B	05/18/15	19.25
n-Butylbenzene	104-51-8	U	.005	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
sec-Butylbenzene	135-98-8	U	.0039	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
tert-Butylbenzene	98-06-6	U	.004	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Carbon Disulfide	75-15-0	U	.0054	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Carbon tetrachloride	56-23-5	U	.0063	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Chlorobenzene	108-90-7	U	.0041	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Chlorodibromomethane	124-48-1	U	.0072	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Chloroethane	75-00-3	U	.018	0.048	.09625	mg/kg		8260B	05/18/15	19.25
Chloroform	67-66-3	U	.0044	0.048	.09625	mg/kg		8260B	05/18/15	19.25
Chloromethane	74-87-3	U	.0072	0.0096	.048125	mg/kg		8260B	05/18/15	19.25
2-Chlorotoluene	95-49-8	U	.0058	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
4-Chlorotoluene	106-43-4	U	.0046	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,2-Dibromo-3-Chloropropane	96-12-8	U	.02	0.048	.09625	mg/kg		8260B	05/18/15	19.25
1,2-Dibromoethane	106-93-4	U	.0066	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Dibromomethane	74-95-3	U	.0074	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,2-Dichlorobenzene	95-50-1	U	.0059	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,3-Dichlorobenzene	541-73-1	U	.0046	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,4-Dichlorobenzene	106-46-7	U	.0044	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Dichlorodifluoromethane	75-71-8	U	.014	0.048	.09625	mg/kg	J3	8260B	05/18/15	19.25
1,1-Dichloroethane	75-34-3	U	.0038	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,2-Dichloroethane	107-06-2	U	.0051	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1-Dichloroethene	75-35-4	U	.0058	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
cis-1,2-Dichloroethene	156-59-2	U	.0045	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
trans-1,2-Dichloroethene	156-60-5	U	.0051	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,2-Dichloropropane	78-87-5	U	.0069	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1-Dichloropropene	563-58-6	U	.0061	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,3-Dichloropropane	142-28-9	U	.004	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
cis-1,3-Dichloropropene	10061-01-5	U	.005	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
trans-1,3-Dichloropropene	10061-02-6	U	.0051	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
2,2-Dichloropropane	594-20-7	U	.0054	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Ethylbenzene	100-41-4	U	.0057	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Hexachloro-1,3-butadiene	87-68-3	U	.0066	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
2-Hexanone	591-78-6	U	.073	0.096	.1925	mg/kg		8260B	05/18/15	19.25
Isopropylbenzene	98-82-8	U	.0047	0.0096	.01925	mg/kg		8260B	05/18/15	19.25

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
333 East Wetmore Rd, Ste 400
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-10

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-EX01-F01-12-N

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/05/15 10:35

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	U	.0039	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
2-Butanone (MEK)	78-93-3	U	.09	0.096	.1925	mg/kg		8260B	05/18/15	19.25
Methylene Chloride	75-09-2	U	.019	0.048	.09625	mg/kg		8260B	05/18/15	19.25
4-Methyl-2-pentanone (MIBK)	108-10-1	U	.036	0.096	.1925	mg/kg		8260B	05/18/15	19.25
Methyl tert-butyl ether	1634-04-4	U	.0041	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Naphthalene DNR	~~91-20-3~~	~~U~~	~~.019~~	~~0.048~~	~~.09625~~	~~mg/kg~~		~~8260B~~	~~05/18/15~~	~~19.25~~
n-Propylbenzene	103-65-1	U	.004	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Styrene	100-42-5	U	.0045	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1,1,2-Tetrachloroethane	630-20-6	U	.0051	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1,2,2-Tetrachloroethane	79-34-5	U	.007	0.014	.01925	mg/kg		8260B	05/18/15	19.25
Tetrachloroethene	127-18-4	U	.0053	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Toluene	108-88-3	U	.0084	0.048	.09625	mg/kg		8260B	05/18/15	19.25
1,2,3-Trichlorobenzene US CCAL	87-61-6	U	.0059	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,2,4-Trichlorobenzene	120-82-1	U	.0075	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1,1-Trichloroethane	71-55-6	U	.0055	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,1,2-Trichloroethane	79-00-5	U	.0053	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Trichloroethene	79-01-6	U	.0054	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Trichlorofluoromethane	75-69-4	U	.0074	0.048	.09625	mg/kg		8260B	05/18/15	19.25
1,2,3-Trichloropropane	96-18-4	U	.014	0.019	.048125	mg/kg		8260B	05/18/15	19.25
1,2,4-Trimethylbenzene	95-63-6	U	.0041	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
1,3,5-Trimethylbenzene	108-67-8	U	.0051	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
o-Xylene	95-47-6	U	.0065	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
m&p-Xylene	1330-20-7	U	.014	0.019	.0385	mg/kg		8260B	05/18/15	19.25
Vinyl chloride	75-01-4	U	.0056	0.0096	.01925	mg/kg		8260B	05/18/15	19.25
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	05/18/15	1
Dibromofluoromethane	1868-53-7	105.				% Rec.		8260B	05/18/15	1
4-Bromofluorobenzene	460-00-4	112.				% Rec.		8260B	05/18/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
8181 E. Tufts Avenue
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-11

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-TRIPBLANK-01-B

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/06/15 12:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
TPH (GC/FID) Low Fraction	8006-61-9	U	31	50.	100	ug/l		8015D/G	05/12/15	1
Surrogate Recovery-%										
a,a,a-Trifluorotoluene(FID)	98-08-8	96.5				% Rec.		8015D/G	05/12/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	05/20/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	05/20/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	05/20/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	05/20/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	05/20/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	05/20/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	05/20/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	05/20/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	05/20/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	05/20/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	05/20/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	05/20/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	05/20/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	05/20/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l		8260B	05/20/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	05/20/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l		8260B	05/20/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	05/20/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	05/20/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	05/20/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	05/20/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	05/20/15	1
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	05/20/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	05/20/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	05/20/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	05/20/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	05/20/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	05/20/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	05/20/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	05/20/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	05/20/15	1
1;2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	05/20/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	05/20/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	05/20/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	05/20/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	05/20/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	05/20/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	05/20/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	05/20/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	05/20/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	05/20/15	1

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Note:
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS Corporation - Tucson AZ - 1088
8181 E. Tufts Avenue
Denver, CO 80237

May 20, 2015

ESC Sample # : L764216-11

Date Received : May 08, 2015
Description : Holloman AFB

Site ID :

Sample ID : TU503-TRIPBLANK-01-B

Project # : 23446543.00554A

Collected By : Jon Mallonee
Collection Date : 05/06/15 12:50

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	05/20/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	05/20/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	05/20/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	05/20/15	1
Methyl tert-butyl ether	1634-04-4	U	0.37	0.50	1	ug/l		8260B	05/20/15	1
Naphthalene	91-20-3	U	1	2.5	5	ug/l		8260B	05/20/15	1
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	05/20/15	1
Styrene	100-42-5	U	0.31	0.50	1	ug/l		8260B	05/20/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	05/20/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	05/20/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	05/20/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	05/20/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	05/20/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	05/20/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	05/20/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	05/20/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	05/20/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	05/20/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	05/20/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	05/20/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	05/20/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	05/20/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	05/20/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	05/20/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	111.				% Rec.		8260B	05/20/15	1
Dibromofluoromethane	1868-53-7	94.1				% Rec.		8260B	05/20/15	1
4-Bromofluorobenzene	460-00-4	98.2				% Rec.		8260B	05/20/15	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: 05/20/15 11:04 Printed: 05/20/15 11:05

KA 8/24/15

Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L766918
Sampling Event Dates: May 20, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Anna Kakai & Katie Abbott, URS Project Chemist
Date Completed: September 10, 2015
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							
				GRO	DRO/ORO	VOCs	PAHs	SVOCs	Total Metals	Dissolved Metals	TDS
L766918											
H-TU904-MW17-ND01	SA	L766918-01	Water	---	---	---	---	---	---	X	---
H-TU904-MW17-NT01	SA	L766918-02	Water	---	---	X	X	X	X	---	X
H-TU904-MW18-ND01	SA	L766918-03	Water	---	---	---	---	---	---	X	---
H-TU904-MW18-NT01	SA	L766918-04	Water	---	---	X	X	X	X	---	X
H-TU515-MW04-ND01	SA	L766918-05	Water	---	---	---	---	---	---	X	---
H-TU515-MW04-NT01	SA	L766918-06	Water	---	---	X	X	X	X	---	X
H-TU503-MW04-ND01	SA	L766918-07	Water	---	---	---	---	---	---	X	---
H-TU503-MW04-NT01	SA	L766918-08	Water	---	---	X	X	X	X	---	X
H-TUQC-TRIPBLANK-TT01	TB	L766918-09	Water	---	---	X	---	---	---	---	---

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

Analyses:

DRO/ORO - Diesel and Oil Range Organics (8015D)
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 (6010B/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	Yes	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.
Reporting	Yes	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, and no results were changed. 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 are not reported by Method 8270C SVOCs but are reported by Method 8260B volatile organic compounds (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.

Review Parameter	Criteria Met?	Comment
Matrix Quality Control • Matrix Spike/ Matrix Spike Duplicate None in this package • Total vs. Partial Analyses (Metals)	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. 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: • 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 5x the LOQ, the absolute difference between the results is compared against an evaluation criterion of 2xLOQ. The total metal sample results were compared with the associated dissolved sample results against the concentration-dependent criteria set forth in SOP 14.
Metals Only • Serial Dilution None in this package • Post Digestion Spike None in this package	NA	**Serial Dilution (Metals Only)** A serial dilution was not reported in association with the sample in this data package. **Post Digestion Spike (PDS) (Metals Only)** A post digestion spike was not reported in association with the sample in this data package.
Method Quality Control • Surrogates (VOCs, PAHs, SVOCs)	No	With the exceptions listed in Table 2, the surrogate recoveries were within the laboratory specified acceptance criteria.
Field Quality Control • Trip Blank H-TUQC-TRIPBLANK-TT01 (VOCs) • Field Duplicate None in this package • Equipment Blank None in this package • Field Blank None in this package	Yes	**Trip Blank** Target analytes were not detected in the trip blank. **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

Review Parameter	Criteria Met?	Comment
		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. A field blank was not submitted with this data package. See Section 4.4 of the data validation report for overall qualifiers resulting from the field blank evaluation.
LODs met?	No	Due to dilutions, some results for SVOCs were reported as non-detect or estimated at elevated LODs. See Section 3.7 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 Polynuclear Aromatic Hydrocarbons (PAHs)** The %RSD values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **Methods 6010B (Inductively Coupled Plasma [ICP] Metals) and 6020 (ICPMS Metals)** 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
		7470A (Mercury) The ICALs were performed in association with the samples reported in this package. The relationship between instrument response and concentration was established with five standards. The correlation coefficient was >0.995. The calibration was verified with the analysis of an ICV standard. The analytes were recovered within the acceptance range of 90-110%. Response and linearity criteria were met and data qualification on the basis of initial calibration was not necessary. **Total Dissolved Solids (TDS)** ICALs are not required per the method for TDS.
Initial Calibration Verification/Continuing Calibration Verification	No	**Method 8260B VOCs** 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 PAHs/SVOCs** With the exceptions listed in Table 3, the %D values for all target analytes in the calibration were less than 20%. **Methods 6010B (ICP Metals), 6020 (ICPMS Metals), and 7470A (Mercury)** 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%. **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, 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 4 summarizes the resultant data qualification on the basis of the ICS results.
Internal Standard	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.

Review Parameter	Criteria Met?	Comment
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 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
CCCs – Calibration Check Compounds
COC – Chain of Custody
DLs – Detection Limits
DOD – Department of Defense
ICAL – Initial Calibration
ICP – Inductively Coupled Plasma
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
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
VOCs – Volatile Organic Compounds

Table 1: Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
Total Metals			
MB Batch WG791805 H-TU904-MW17-NT01 H-TU904-MW18-NT01 H-TU515-MW04-NT01 H-TU503-MW04-NT01	Copper	0.780 µg/L	The associated copper results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
Dissolved Metals			
MB Batch WG791888 H-TU904-MW17-ND01 H-TU904-MW18-ND01 H-TU515-MW04-ND01 H-TU503-MW04-ND01	Vanadium	0.342 µg/L	None. The associated results were reported at concentrations >5x the concentration of the blank contamination.
VOCs			
MB Batch WG791367 H-TU904-MW17-NT01 H-TU904-MW18-NT01 H-TU515-MW04-NT01 H-TU503-MW04-NT01	1,2,3-Trichlorobenzene	0.332 µg/L	None. The associated results were reported as non-detect.
	1,2,4-Trichlorobenzene	0.377 µg/L	

Associated Samples	Analyte	Concentration	Qualification
SVOCs			
MB Batch WG791315 H-TU904-MW17-NT01 H-TU904-MW18-NT01 H-TU515-MW04-NT01 H-TU503-MW04-NT01	Dimethyl phthalate	0.393 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 WG791315 H-TU904-MW17-NT01 H-TU904-MW18-NT01 H-TU515-MW04-NT01 H-TU503-MW04-NT01	Di-n-butyl phthalate	0.450 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
PAHs			
MB Batch WG791233 H-TU904-MW17-NT01 H-TU904-MW18-NT01 H-TU515-MW04-NT01 H-TU503-MW04-NT01	Benzo(b)fluoranthene	0.00235 µg/L	The associated benzo(b) luoranthene result for sample H-TU904-MW18-NT01 was reported at a concentration <5x the concentration of the blank contamination and was qualified as non-detect (U MB-I).

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

Table 2: Surrogate Recovery Outliers and Resultant Data Qualification

Sample	Surrogate	%R (Limits)	Qualification
VOCs			
H-TU904-MW17-NT01	4-Bromofluorobenzene	**125** (80.1-120)	As the potential bias was considered to be high, the detected VOC results were qualified as estimated (J SUR-H).

%R - Percent Recovery
H – High Bias
J – Estimated
SUR – Surrogate
VOCs – Volatile Organic Compounds
Bold indicates a recovery outside of acceptance limits.

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

Associated Samples	Analyte	%D (Limit)	Data Qualification
VOCs			
H-TUQC-TRIPBLANK-TT01	4-Methyl-2-pentanone	+21.2 (±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.
	Trans-1,3-Dichloropropene	+25.7 (±20)	
	2-Hexanone	+20.9 (±20)	
	1,2,4-Trichlorobenzene	-24.3 (±20)	As the potential bias was considered to be low, the associated results were qualified as estimated (UJ CCAL-L).
	Hexachloro-1,3-butadiene	-24.4 (±20)	

Associated Samples	Analyte	%D (Limit)	Data Qualification
	Naphthalene	-24.6 (±20)	
	Bromoform	-26.3 (±20)	
	1,2,3-Trichlorobenzene	-25.1 (±20)	
SVOCs			
H-TU904-MW17-NT01 H-TU904-MW18-NT01 H-TU515-MW04-NT01 H-TU503-MW04-NT01	Bis(2-chlorethoxy)methane	-21.1 (±20)	As the potential bias was considered to be low, the associated results were qualified as estimated (UJ CCAL-L).
	Bis(2-chloroethyl)ether	-32.1 (±20)	
	Hexachloroethane	-21.3 (±20)	
	4,6-Dinitro-2-methylphenol	-21.1 (±20)	
	3&4-Methyl Phenol	-51.5 (±20)	

± - Plus or minus
H – Low Bias
%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)	MDL (µg/L)	Qualified Samples	Qualification
Calcium	Cadmium	0.4	0.16	H-TU904-MW17-NT01	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
Calcium, Magnesium	Cadmium	0.4	0.16	H-TU904-MW18-NT01	
Calcium	Nickel	0.7	0.35	H-TU515-MW04-NT01	
Calcium	Chromium	1.4	0.54	H-TU904-MW17-ND01	
	Copper	0.7	0.52		
Calcium, Magnesium	Cadmium	0.4	0.16	H-TU904-MW18-ND01	
	Chromium	1.4	0.54		
	Copper	0.7	0.52		
Calcium	Copper	0.7	0.52	H-TU515-MW04-ND01	
Calcium, Magnesium	Copper	0.7	0.52	H-TU503-MW04-ND01	

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

Table 5: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
SVOCs				
LCS WG791315 H-TU904-MW17-NT01 H-TU904-MW18-NT01 H-TU515-MW04-NT01 H-TU503-MW04-NT01	Benzoic Acid	**16.6/9.97** (10-125)	**49.91** (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 unuseable (R).
VOCs				
LCS WG791367 H-TU904-MW17-NT01 H-TU904-MW18-NT01 H-TU515-MW04-NT01 H-TU503-MW04-NT01	Chloroethane	**136/154** (60-135)	12.41 (30)	As the potential bias was considered to be high, and the associated samples were reported as non-detect, data qualification was not considered necessary.

%R – Percent Recoveries
D – Duplicate or spike duplicate precision evaluation criteria not met
I – Indeterminate Bias
J – Estimated
L – Low Bias
LCS – Laboratory Control Sample
R – Unusable
SVOCs – Semivolatile Organic Compounds
VOCs – Volatile Organic Compounds
Bold indicates a recovery outside of acceptance limits.

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L766918-01

Date Received : May 22, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-TU904-MW17-ND01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/20/15 10:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Antimony, Dissolved F SOL-I	7440-36-0	0.32	0.21	0.50	2	ug/l	J	6020	05/29/15	1
Arsenic, Dissolved F SOL-I	7440-38-2	0.98	0.25	0.50	2	ug/l	J	6020	05/31/15	1
Barium, Dissolved	7440-39-3	42.	0.36	1.0	5	ug/l		6020	05/29/15	1
Beryllium, Dissolved	7440-41-7	U	0.12	0.50	2	ug/l		6020	05/29/15	1
Cadmium, Dissolved	7440-43-9	U	0.16	0.50	1	ug/l		6020	05/29/15	1
Chromium, Dissolved ~~F SOL-I~~ F JSOL-CS-H	7440-47-3	1.2	0.54	1.5	2	ug/l	J	6020	05/29/15	1
Copper, Dissolved F JSOL-I CS-H	7440-50-8	1.1	0.52	1.5	5	ug/l	J	6020	05/29/15	1
Cobalt, Dissolved F SOL-I	7440-48-4	0.93	0.26	0.50	2	ug/l	J	6020	05/29/15	1
Lead, Dissolved	7439-92-1	U	0.24	0.50	2	ug/l		6020	05/29/15	1
Manganese, Dissolved	7439-96-5	180	0.25	0.50	5	ug/l		6020	05/29/15	1
Nickel, Dissolved	7440-02-0	2.2	0.35	1.0	2	ug/l		6020	05/29/15	1
Selenium, Dissolved	7782-49-2	9.6	0.38	1.0	2	ug/l		6020	05/29/15	1
Silver, Dissolved	7440-22-4	U	0.31	0.50	2	ug/l		6020	05/29/15	1
Thallium, Dissolved	7440-28-0	U	0.19	0.50	2	ug/l		6020	05/29/15	1
Vanadium, Dissolved F SOL-I	7440-62-2	2.0	0.18	0.50	5	ug/l	J	6020	05/29/15	1
Zinc, Dissolved F SOL-I	7440-66-6	3.9	2.6	5.0	25	ug/l	J	6020	05/29/15	1
Mercury, Dissolved	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum, Dissolved F SOL-I	7429-90-5	63.	35	50.	100	ug/l	J	6010B	05/31/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU904-MW17-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 10:30

ESC Sample # : L766918-02

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	11000000	2800	5000	10000	ug/l		2540 C-	05/27/15	1
Antimony FJ SQL, ~~ICS-H~~ -I	7440-36-0	0.30	0.21	0.50	2	ug/l	J	6020	06/01/15	1
Arsenic	7440-38-2	2.1	0.25	0.50	2	ug/l		6020	06/03/15	1
Barium	7440-39-3	50.	0.36	1.0	5	ug/l		6020	06/01/15	1
Beryllium F SQL-I	7440-41-7	0.22	0.12	0.50	2	ug/l	J	6020	06/01/15	1
Cadmium FJ SQL, ICS-H	7440-43-9	0.21	0.16	0.50	1	ug/l	J	6020	06/03/15	1
Chromium J MS-L	7440-47-3	6.7	0.54	1.5	2	ug/l		6020	06/03/15	1
Copper UJMBJ MS-L	7440-50-8	2.7	~~0.52~~ 2.7	~~1.5~~ 2.7	5	ug/l	J	6020	06/01/15	1
Cobalt	7440-48-4	2.5	0.26	0.50	2	ug/l		6020	06/01/15	1
Lead	7439-92-1	2.8	0.24	0.50	2	ug/l		6020	06/01/15	1
Manganese	7439-96-5	260	0.25	0.50	5	ug/l		6020	06/01/15	1
Nickel J MS-L	7440-02-0	5.0	0.35	1.0	2	ug/l		6020	06/01/15	1
Selenium ~~F~~J SQL, ~~ICS-H~~ I	7782-49-2	9.6	0.38	1.0	2	ug/l		6020	06/01/15	1
Silver	7440-22-4	U	0.31	0.50	2	ug/l		6020	06/03/15	1
Thallium	7440-28-0	U	0.19	0.50	2	ug/l		6020	06/01/15	1
Vanadium	7440-62-2	5.9	0.18	0.50	5	ug/l		6020	06/01/15	1
Zinc FJSQL, I MS-L	7440-66-6	12.	2.6	5.0	25	ug/l	J	6020	06/01/15	1
Mercury UJ MS-L	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum J MS-L	7429-90-5	2000	35	50.	100	ug/l		6010B	05/29/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane J SUR-H	75-27-4	1.1	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l	J4	8260B	06/02/15	1
Chloroform ~~J SUR-H~~ FJ SQL, SUR-H	67-66-3	2.3	0.32	2.5	5	ug/l	J	8260B	06/02/15	1
Chloromethane ~~F SQL I~~	74-87-3	U	0.28	0.50	2.5	ug/l	J3	8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1

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Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
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Sample ID : H-TU904-MW17-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 10:30

ESC Sample # : L766918-02

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane J SQL, SUR-H	75-34-3	0.63	0.26	0.50	1	ug/l	J	8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene J SUR-H	75-35-4	1.7	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1
Methyl tert-butyl ether	1634-04-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
DNR. ~~Naphthalene~~	~~91-20-3~~	~~U~~	~~1~~	~~2.5~~	~~5~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Styrene R	~~100-42-5~~	~~U~~	~~0.31~~	~~0.50~~	~~1~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	~~1~~
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/02/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene J SUR-H	79-01-6	9.5	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	06/02/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/02/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/02/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	107.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	106.				% Rec.		8260B	06/02/15	1

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Denver, CO 80237

June 25, 2015

ESC Sample # : L766918-02

Date Received : May 22, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-TU904-MW17-NT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/20/15 10:30

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	125.				% Rec.	J1	8260B	06/02/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.008	0.025	0.05	ug/l		8270 C-	05/27/15	1
Acenaphthene	83-32-9	U	0.01	0.025	0.05	ug/l		8270 C-	05/27/15	1
Acenaphthylene	208-96-8	U	0.007	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(a)anthracene UJ MS-L	56-55-3	U	0.0083	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(a)pyrene	50-32-8	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(b)fluoranthene	205-99-2	U	0.0021	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.0023	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(k)fluoranthene	207-08-9	U	0.026	0.035	0.05	ug/l		8270 C-	05/27/15	1
Chrysene	218-01-9	U	0.014	0.025	0.05	ug/l		8270 C-	05/27/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.0045	0.025	0.05	ug/l		8270 C-	05/27/15	1
Fluoranthene	206-44-0	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
Fluorene	86-73-7	U	0.009	0.025	0.05	ug/l		8270 C-	05/27/15	1
Indeno(1,2,3-cd)pyrene UJ MS-L	193-39-5	U	0.0074	0.025	0.05	ug/l		8270 C-	05/27/15	1
Naphthalene	91-20-3	U	0.012	0.025	0.25	ug/l		8270 C-	05/27/15	1
Phenanthrene	85-01-8	U	0.018	0.025	0.05	ug/l		8270 C-	05/27/15	1
Pyrene	129-00-0	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
1-Methylnaphthalene	90-12-0	U	0.018	0.025	0.25	ug/l		8270 C-	05/27/15	1
2-Methylnaphthalene	91-57-6	U	0.016	0.025	0.25	ug/l		8270 C-	05/27/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	66.8				% Rec.		8270 C-	05/27/15	1
2-Fluorobiphenyl	321-60-8	60.2				% Rec.		8270 C-	05/27/15	1
p-Terphenyl-d14	1718-51-0	62.5				% Rec.		8270 C-	05/27/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane UJ CCAL-L	111-91-1	U	0.41	6.3	12.5	ug/l		8270C	05/27/15	1.25
Bis(2-chloroethyl)ether UJ CCAL-L	111-44-4	U	2	6.3	12.5	ug/l		8270C	05/27/15	1.25
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.56	6.3	12.5	ug/l		8270C	05/27/15	1.25
Benzyl Alcohol	100-51-6	U	0.49	6.3	12.5	ug/l		8270C	05/27/15	1.25
Carbazole	86-74-8	U	0.32	6.3	12.5	ug/l		8270C	05/27/15	1.25
Benzoic acid R	~~65-85-0~~	~~U~~ U	~~0.55~~ 0.55	~~6.3~~ 6.3	~~12.5~~ 12.5	~~ug/l~~	~~J3~~	~~8270C~~	~~05/27/15~~	~~1.25~~
Dibenzofuran	132-64-9	U	0.42	6.3	12.5	ug/l		8270C	05/27/15	1.25
4-Bromophenyl-phenylether	101-55-3	U	0.42	6.3	12.5	ug/l		8270C	05/27/15	1.25
2-Chloronaphthalene	91-58-7	U	0.41	0.63	1.25	ug/l		8270C	05/27/15	1.25
4-Chlorophenyl-phenylether	7005-72-3	U	0.38	6.3	12.5	ug/l		8270C	05/27/15	1.25
3,3-Dichlorobenzidine	91-94-1	U	2.5	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dinitrotoluene	121-14-2	U	2.1	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,6-Dinitrotoluene	606-20-2	U	0.35	6.3	12.5	ug/l		8270C	05/27/15	1.25
Hexachlorobenzene	118-74-1	U	0.43	0.63	1.25	ug/l		8270C	05/27/15	1.25
DNR ~~Hexachloro-1,3-butadiene~~	~~87-68-3~~	~~U~~	~~0.41~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.25~~
Hexachloroethane UJ CCAL-L	67-72-1	U	0.46	6.3	12.5	ug/l		8270C	05/27/15	1.25
Isophorone	78-59-1	U	0.34	6.3	12.5	ug/l		8270C	05/27/15	1.25
Nitrobenzene	98-95-3	U	0.46	6.3	12.5	ug/l		8270C	05/27/15	1.25
n-Nitrosodimethylamine	62-75-9	U	1.6	6.3	12.5	ug/l		8270C	05/27/15	1.25

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Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.38	6.3	12.5	ug/l		8270C	05/27/15	1.25
n-Nitrosodi-n-propylamine	621-64-7	U	0.5	6.3	12.5	ug/l		8270C	05/27/15	1.25
Benzylbutyl phthalate	85-68-7	U	0.34	1.3	3.75	ug/l		8270C	05/27/15	1.25
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.89	1.3	3.75	ug/l		8270C	05/27/15	1.25
Di-n-butyl phthalate U MB-I	84-74-2	~~0.60~~ 1.3	~~0.33~~ 0.60	1.3	3.75	ug/l	J	8270C	05/27/15	1.25
Diethyl phthalate	84-66-2	U	0.35	1.3	3.75	ug/l		8270C	05/27/15	1.25
Dimethyl phthalate U MB-I	131-11-3	~~0.37~~ 1.3	~~0.35~~ 0.37	1.3	3.75	ug/l	J	8270C	05/27/15	1.25
Di-n-octyl phthalate	117-84-0	U	0.35	1.3	3.75	ug/l		8270C	05/27/15	1.25
DNR ~~1,2,4-Trichlorobenzene~~	~~120-82-1~~	~~U~~	~~0.44~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.25~~
Acid Extractables										
4-Chloro-3-methylphenol UJ MS-L	59-50-7	U	0.33	6.3	12.5	ug/l		8270C	05/27/15	1.25
2-Chlorophenol	95-57-8	U	0.35	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dichlorophenol UJ MS-L	120-83-2	U	0.36	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dimethylphenol	105-67-9	U	0.78	6.3	12.5	ug/l		8270C	05/27/15	1.25
4,6-Dinitro-2-methylphenol UJ CCAL-L	534-52-1	U	3.3	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dinitrophenol	51-28-5	U	4.1	6.3	12.5	ug/l	J3	8270C	05/27/15	1.25
2-Methylphenol R	95-48-7	U	~~0.39~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.25~~
3&4-Methyl Phenol ~~UJ CCAL-CR~~	~~3&4-Methyl~~	~~U~~	~~0.33~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.25~~
2-Nitrophenol	88-75-5	U	0.4	6.3	12.5	ug/l		8270C	05/27/15	1.25
4-Nitrophenol	100-02-7	U	2.5	6.3	12.5	ug/l		8270C	05/27/15	1.25
4-Chloroaniline	106-47-8	U	0.48	6.3	12.5	ug/l		8270C	05/27/15	1.25
2-Nitroaniline	88-74-4	U	2.4	6.3	12.5	ug/l		8270C	05/27/15	1.25
3-Nitroaniline	99-09-2	U	0.38	6.3	12.5	ug/l		8270C	05/27/15	1.25
1,2-Diphenylhydrazine	103-33-3	U	0.4	6.3	12.5	ug/l		8270C	05/27/15	1.25
4-Nitroaniline	100-01-6	U	0.44	6.3	12.5	ug/l		8270C	05/27/15	1.25
Pentachlorophenol	87-86-5	U	0.39	6.3	12.5	ug/l		8270C	05/27/15	1.25
Phenol	108-95-2	U	0.42	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4,5-Trichlorophenol	95-95-4	U	0.3	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4,6-Trichlorophenol	88-06-2	U	0.37	6.3	12.5	ug/l		8270C	05/27/15	1.25
Surrogate Recovery										
2-Fluorophenol	367-12-4	56.9				% Rec.		8270C	05/27/15	1.25
Phenol-d5	4165-62-2	34.7				% Rec.		8270C	05/27/15	1.25
Nitrobenzene-d5	4165-60-0	67.8				% Rec.		8270C	05/27/15	1.25
2-Fluorobiphenyl	321-60-8	72.4				% Rec.		8270C	05/27/15	1.25
2,4,6-Tribromophenol	118-79-6	79.1				% Rec.		8270C	05/27/15	1.25
p-Terphenyl-d14	1718-51-0	68.5				% Rec.		8270C	05/27/15	1.25

AK 09/04/15

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU904-MW18-ND01

Collected By : Jon Mallonee
Collection Date : 05/20/15 09:15

ESC Sample # : L766918-03

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Antimony, Dissolved F SQL-I	7440-36-0	0.36	0.21	0.50	2	ug/l	J	6020	05/29/15	1
Arsenic, Dissolved F SQL-I	7440-38-2	1.1	0.25	0.50	2	ug/l	J	6020	05/31/15	1
Barium, Dissolved	7440-39-3	50.	0.36	1.0	5	ug/l		6020	05/29/15	1
Beryllium, Dissolved	7440-41-7	U	0.12	0.50	2	ug/l		6020	05/29/15	1
Cadmium, Dissolved F SQL-I ICS-H	7440-43-9	0.19	0.16	0.50	1	ug/l	J	6020	05/29/15	1
Chromium, Dissolved F SQL-I ICS-H	7440-47-3	1.3	0.54	1.5	2	ug/l	J	6020	05/29/15	1
Copper, Dissolved F SQL-I ICS-H	7440-50-8	1.2	0.52	1.5	5	ug/l	J	6020	05/29/15	1
Cobalt, Dissolved F SQL-I	7440-48-4	1.3	0.26	0.50	2	ug/l	J	6020	05/29/15	1
Lead, Dissolved	7439-92-1	U	0.24	0.50	2	ug/l		6020	05/29/15	1
Manganese, Dissolved	7439-96-5	220	0.25	0.50	5	ug/l		6020	05/29/15	1
Nickel, Dissolved	7440-02-0	3.0	0.35	1.0	2	ug/l		6020	05/29/15	1
Selenium, Dissolved	7782-49-2	18.	0.38	1.0	2	ug/l		6020	05/29/15	1
Silver, Dissolved	7440-22-4	U	0.31	0.50	2	ug/l		6020	05/29/15	1
Thallium, Dissolved	7440-28-0	U	0.19	0.50	2	ug/l		6020	05/29/15	1
Vanadium, Dissolved F SQL-I	7440-62-2	2.2	0.18	0.50	5	ug/l	J	6020	05/29/15	1
Zinc, Dissolved F SQL-I	7440-66-6	10.	2.6	5.0	25	ug/l	J	6020	05/29/15	1
Mercury, Dissolved	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum, Dissolved F SQL-I	7429-90-5	76.	35	50.	100	ug/l	J	6010B	05/31/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

ESC Sample # : L766918-04

Sample ID : H-TU904-MW18-NT01

Site ID :

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/20/15 09:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	14000000	2800	5000	10000	ug/l		2540 C-	05/27/15	1
Antimony F J SQL, ~~ICS-H~~ I	7440-36-0	0.40	0.21	0.50	2	ug/l	J	6020	06/01/15	1
Arsenic	7440-38-2	2.6	0.25	0.50	2	ug/l		6020	06/03/15	1
Barium	7440-39-3	68.	0.36	1.0	5	ug/l		6020	06/01/15	1
Beryllium F SQL-I	7440-41-7	0.20	0.12	0.50	2	ug/l	J	6020	06/01/15	1
Cadmium FJ SQL, ICS-H	7440-43-9	0.21	0.16	0.50	1	ug/l	J	6020	06/03/15	1
Chromium ~~B MS-L~~ FJ ~~SQL~~, MS-L	7440-47-3	5.7	0.54	1.5	2	ug/l		6020	06/03/15	1
Copper UJ MB, J, I MS-L	7440-50-8	3.5	3.5 ~~0.53~~	~~1.5~~ 3.5	5	ug/l	J	6020	06/01/15	1
Cobalt	7440-48-4	2.8	0.26	0.50	2	ug/l		6020	06/01/15	1
Lead	7439-92-1	3.3	0.24	0.50	2	ug/l		6020	06/01/15	1
Manganese	7439-96-5	290	0.25	0.50	5	ug/l		6020	06/01/15	1
Nickel J MS-L	7440-02-0	5.8	0.35	1.0	2	ug/l		6020	06/01/15	1
Selenium	7782-49-2	18.	0.38	1.0	2	ug/l		6020	06/01/15	1
Silver	7440-22-4	U	0.31	0.50	2	ug/l		6020	06/03/15	1
Thallium	7440-28-0	U	0.19	0.50	2	ug/l		6020	06/01/15	1
Vanadium	7440-62-2	7.3	0.18	0.50	5	ug/l		6020	06/01/15	1
Zinc FJ SQL, I MS-L	7440-66-6	24.	2.6	5.0	25	ug/l	J	6020	06/01/15	1
Mercury UJ MS-L	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum J MS-L	7429-90-5	1900	35	50.	100	ug/l		6010B	05/29/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l	J4	8260B	06/02/15	1
Chloroform F SQL-I	67-66-3	0.40	0.32	2.5	5	ug/l	J	8260B	06/02/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l	J3	8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU904-MW18-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 09:15

ESC Sample # : L766918-04

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1
Methyl tert-butyl ether	1634-04-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.5~~	~~5~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	1
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Styrene R	~~100-42-5~~	~~U~~	~~0.31~~	~~0.50~~	~~1~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/02/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene	79-01-6	10.	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	06/02/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/02/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/02/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	109.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	111.				% Rec.		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L766918-04

Date Received : May 22, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-TU904-MW18-NT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/20/15 09:15

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	106.				% Rec.		8260B	06/02/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.008	0.025	0.05	ug/l		8270 C-	05/27/15	1
Acenaphthene	83-32-9	U	0.01	0.025	0.05	ug/l		8270 C-	05/27/15	1
Acenaphthylene	208-96-8	U	0.007	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(a)anthracene UJ MS-L	56-55-3	U	0.0083	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(a)pyrene	50-32-8	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(b)fluoranthene UJ MB-2 MS-L	205-99-2	~~0.0030~~ 0.025	~~0.0021~~ 0.0030	0.025	0.05	ug/l	J	8270 C-	05/27/15	1
Benzo(g,h,i)perylene UJ MS-L	191-24-2	U	0.0023	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(k)fluoranthene	207-08-9	U	0.026	0.035	0.05	ug/l		8270 C-	05/27/15	1
Chrysene	218-01-9	U	0.014	0.025	0.05	ug/l		8270 C-	05/27/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.0045	0.025	0.05	ug/l		8270 C-	05/27/15	1
Fluoranthene	206-44-0	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
Fluorene	86-73-7	U	0.009	0.025	0.05	ug/l		8270 C-	05/27/15	1
Indeno(1,2,3-cd)pyrene UJ MS-L	193-39-5	U	0.0074	0.025	0.05	ug/l		8270 C-	05/27/15	1
Naphthalene	91-20-3	U	0.012	0.025	0.25	ug/l		8270 C-	05/27/15	1
Phenanthrene	85-01-8	U	0.018	0.025	0.05	ug/l		8270 C-	05/27/15	1
Pyrene	129-00-0	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
1-Methylnaphthalene	90-12-0	U	0.018	0.025	0.25	ug/l		8270 C-	05/27/15	1
2-Methylnaphthalene	91-57-6	U	0.016	0.025	0.25	ug/l		8270 C-	05/27/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	67.5				% Rec.		8270 C-	05/27/15	1
2-Fluorobiphenyl	321-60-8	60.3				% Rec.		8270 C-	05/27/15	1
p-Terphenyl-d14	1718-51-0	63.9				% Rec.		8270 C-	05/27/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane UJ CCAL-L	111-91-1	U	0.41	6.3	12.5	ug/l		8270C	05/27/15	1.25
Bis(2-chloroethyl)ether UJ CCAL-L	111-44-4	U	2	6.3	12.5	ug/l		8270C	05/27/15	1.25
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.56	6.3	12.5	ug/l		8270C	05/27/15	1.25
Benzyl Alcohol	100-51-6	U	0.49	6.3	12.5	ug/l		8270C	05/27/15	1.25
Carbazole	86-74-8	U	0.32	6.3	12.5	ug/l		8270C	05/27/15	1.25
Benzoic acid DNR	~~65-85-0~~	~~U~~ U	~~0.55~~ 0.55	~~6.3~~ 6.3	~~12.5~~ 12.5	~~ug/l~~	~~J3~~	~~8270C~~	~~05/27/15~~	~~1.25~~
Dibenzofuran	132-64-9	U	0.42	6.3	12.5	ug/l		8270C	05/27/15	1.25
4-Bromophenyl-phenylether	101-55-3	U	0.42	6.3	12.5	ug/l		8270C	05/27/15	1.25
2-Chloronaphthalene	91-58-7	U	0.41	0.63	1.25	ug/l		8270C	05/27/15	1.25
4-Chlorophenyl-phenylether	7005-72-3	U	0.38	6.3	12.5	ug/l		8270C	05/27/15	1.25
3,3-Dichlorobenzidine	91-94-1	U	2.5	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dinitrotoluene	121-14-2	U	2.1	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,6-Dinitrotoluene	606-20-2	U	0.35	6.3	12.5	ug/l		8270C	05/27/15	1.25
Hexachlorobenzene	118-74-1	U	0.43	0.63	1.25	ug/l		8270C	05/27/15	1.25
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.41~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.25~~
Hexachloroethane UJ CCAL-L	67-72-1	U	0.46	6.3	12.5	ug/l		8270C	05/27/15	1.25
Isophorone	78-59-1	U	0.34	6.3	12.5	ug/l		8270C	05/27/15	1.25
Nitrobenzene	98-95-3	U	0.46	6.3	12.5	ug/l		8270C	05/27/15	1.25
n-Nitrosodimethylamine	62-75-9	U	1.6	6.3	12.5	ug/l		8270C	05/27/15	1.25

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU904-MW18-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 09:15

ESC Sample # : L766918-04

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.38	6.3	12.5	ug/l		8270C	05/27/15	1.25
n-Nitrosodi-n-propylamine	621-64-7	U	0.5	6.3	12.5	ug/l		8270C	05/27/15	1.25
Benzylbutyl phthalate	85-68-7	U	0.34	1.3	3.75	ug/l		8270C	05/27/15	1.25
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.89	1.3	3.75	ug/l		8270C	05/27/15	1.25
Di-n-butyl phthalate	84-74-2	U	0.33	1.3	3.75	ug/l		8270C	05/27/15	1.25
Diethyl phthalate	84-66-2	U	0.35	1.3	3.75	ug/l		8270C	05/27/15	1.25
Dimethyl phthalate U MB-I	131-11-3	~~0.40~~ 1.3	~~0.35~~ 0.40	1.3	3.75	ug/l	J	8270C	05/27/15	1.25
Di-n-octyl phthalate	117-84-0	U	0.35	1.3	3.75	ug/l		8270C	05/27/15	1.25
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.44~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	1.25
Acid Extractables										
4-Chloro-3-methylphenol UJ MS-L	59-50-7	U	0.33	6.3	12.5	ug/l		8270C	05/27/15	1.25
2-Chlorophenol	95-57-8	U	0.35	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dichlorophenol UJ MS-L	120-83-2	U	0.36	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dimethylphenol	105-67-9	U	0.78	6.3	12.5	ug/l		8270C	05/27/15	1.25
4,6-Dinitro-2-methylphenol UJ CCAL	534-52-1	U	3.3	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dinitrophenol	51-28-5	U	4.1	6.3	12.5	ug/l	J3	8270C	05/27/15	1.25
2-Methylphenol R	~~95-48-7~~	~~U~~	~~0.39~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.25~~
3&4-Methyl Phenol ~~UJ CCAL~~ R	~~3&4-Methyl~~	~~U~~	~~0.33~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.25~~
2-Nitrophenol	88-75-5	U	0.4	6.3	12.5	ug/l		8270C	05/27/15	1.25
4-Nitrophenol	100-02-7	U	2.5	6.3	12.5	ug/l		8270C	05/27/15	1.25
4-Chloroaniline	106-47-8	U	0.48	6.3	12.5	ug/l		8270C	05/27/15	1.25
2-Nitroaniline	88-74-4	U	2.4	6.3	12.5	ug/l		8270C	05/27/15	1.25
3-Nitroaniline	99-09-2	U	0.38	6.3	12.5	ug/l		8270C	05/27/15	1.25
1,2-Diphenylhydrazine	103-33-3	U	0.4	6.3	12.5	ug/l		8270C	05/27/15	1.25
4-Nitroaniline	100-01-6	U	0.44	6.3	12.5	ug/l		8270C	05/27/15	1.25
Pentachlorophenol	87-86-5	U	0.39	6.3	12.5	ug/l		8270C	05/27/15	1.25
Phenol	108-95-2	U	0.42	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4,5-Trichlorophenol	95-95-4	U	0.3	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4,6-Trichlorophenol	88-06-2	U	0.37	6.3	12.5	ug/l		8270C	05/27/15	1.25
Surrogate Recovery										
2-Fluorophenol	367-12-4	55.8				% Rec.		8270C	05/27/15	1.25
Phenol-d5	4165-62-2	34.2				% Rec.		8270C	05/27/15	1.25
Nitrobenzene-d5	4165-60-0	68.4				% Rec.		8270C	05/27/15	1.25
2-Fluorobiphenyl	321-60-8	78.2				% Rec.		8270C	05/27/15	1.25
2,4,6-Tribromophenol	118-79-6	94.4				% Rec.		8270C	05/27/15	1.25
p-Terphenyl-d14	1718-51-0	74.8				% Rec.		8270C	05/27/15	1.25

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU515-MW04-ND01

Collected By : Jon Mallonee
Collection Date : 05/20/15 13:37

ESC Sample # : L766918-05

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Antimony,Dissolved F SQL-I	7440-36-0	0.63	0.21	0.50	2	ug/l	J	6020	05/29/15	1
Arsenic,Dissolved	7440-38-2	3.6	0.25	0.50	2	ug/l		6020	05/31/15	1
Barium,Dissolved	7440-39-3	59.	0.36	1.0	5	ug/l		6020	05/29/15	1
Beryllium,Dissolved	7440-41-7	U	0.12	0.50	2	ug/l		6020	05/29/15	1
Cadmium,Dissolved	7440-43-9	U	0.16	0.50	1	ug/l		6020	05/29/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.5	2	ug/l		6020	05/29/15	1
Copper,Dissolved F SQL-I CS-H	7440-50-8	0.60	0.52	1.5	5	ug/l	J	6020	05/29/15	1
Cobalt,Dissolved	7440-48-4	2.3	0.26	0.50	2	ug/l		6020	05/29/15	1
Lead,Dissolved	7439-92-1	U	0.24	0.50	2	ug/l		6020	05/29/15	1
Manganese,Dissolved	7439-96-5	400	0.25	0.50	5	ug/l		6020	05/29/15	1
Nickel,Dissolved	7440-02-0	3.1	0.35	1.0	2	ug/l		6020	05/29/15	1
Selenium,Dissolved F SQL-I	7782-49-2	0.52	0.38	1.0	2	ug/l	J	6020	05/29/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.50	2	ug/l		6020	05/29/15	1
Thallium,Dissolved	7440-28-0	U	0.19	0.50	2	ug/l		6020	05/29/15	1
Vanadium,Dissolved	7440-62-2	10.	0.18	0.50	5	ug/l		6020	05/29/15	1
Zinc,Dissolved	7440-66-6	U	2.6	5.0	25	ug/l		6020	05/29/15	1
Mercury,Dissolved	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum,Dissolved F SQL-I	7429-90-5	52.	35	50.	100	ug/l	J	6010B	05/31/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU515-MW04-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 13:37

ESC Sample # : L766918-06

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	3500000	2800	5000	10000	ug/l		2540 C-	05/27/15	1
Antimony F ~~J~~ SQL ICS ~~ICS-H~~ -I	7440-36-0	0.47	0.21	0.50	2	ug/l	J	6020	06/01/15	1
Arsenic	7440-38-2	4.0	0.25	0.50	2	ug/l		6020	06/03/15	1
Barium	7440-39-3	60.	0.36	1.0	5	ug/l		6020	06/01/15	1
Beryllium	7440-41-7	U	0.12	0.50	2	ug/l		6020	06/01/15	1
Cadmium	7440-43-9	U	0.16	0.50	1	ug/l		6020	06/03/15	1
Chromium UJ MS-L	7440-47-3	U	0.54	1.5	2	ug/l		6020	06/03/15	1
Copper	7440-50-8	U	0.52	1.5	5	ug/l		6020	06/01/15	1
Cobalt F SQL-I	7440-48-4	1.6	0.26	0.50	2	ug/l	J	6020	06/01/15	1
Lead	7439-92-1	U	0.24	0.50	2	ug/l		6020	06/01/15	1
Manganese	7439-96-5	390	0.25	0.50	5	ug/l		6020	06/01/15	1
Nickel F ~~J~~ SQL ICS ~~J~~ MS-I	7440-02-0	2.8	0.35	1.0	2	ug/l		6020	06/01/15	1
Selenium ~~F J~~ F SQL ~~ICS-H~~ I	7782-49-2	0.49	0.38	1.0	2	ug/l	J	6020	06/01/15	1
Silver	7440-22-4	U	0.31	0.50	2	ug/l		6020	06/03/15	1
Thallium	7440-28-0	U	0.19	0.50	2	ug/l		6020	06/01/15	1
Vanadium	7440-62-2	10.	0.18	0.50	5	ug/l		6020	06/01/15	1
Zinc UJ MS-L	7440-66-6	U	2.6	5.0	25	ug/l		6020	06/01/15	1
Mercury UJ MS-L	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum J MS-L	7429-90-5	120	35	50.	100	ug/l		6010B	05/29/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Carbon Disulfide F SQL-I	75-15-0	0.48	0.28	0.50	1	ug/l	J	8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l	J4	8260B	06/02/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	06/02/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l	J3	8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU515-MW04-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 13:37

ESC Sample # : L766918-06

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Isopropylbenzene ESOL-I	98-82-8	0.54	0.33	0.50	1	ug/l	J	8260B	06/02/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1
Methyl tert-butyl ether	1634-04-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
~~Naphthalene DNR~~	~~91-20-3~~	~~U~~	~~1~~	~~2.5~~	~~5~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
~~Styrene R~~	~~100-42-5~~	~~U~~	~~0.31~~	~~0.50~~	~~1~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	~~1~~
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/02/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	06/02/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/02/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/02/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	107.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	110.				% Rec.		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L766918-06

Date Received : May 22, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-TU515-MW04-NT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/20/15 13:37

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	106.				% Rec.		8260B	06/02/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.008	0.025	0.05	ug/l		8270 C-	05/27/15	1
Acenaphthene	83-32-9	U	0.01	0.025	0.05	ug/l		8270 C-	05/27/15	1
Acenaphthylene	208-96-8	U	0.007	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(a)anthracene UJ MS-L	56-55-3	U	0.0083	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(a)pyrene	50-32-8	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(b)fluoranthene	205-99-2	U	0.0021	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.0023	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(k)fluoranthene	207-08-9	U	0.026	0.035	0.05	ug/l		8270 C-	05/27/15	1
Chrysene	218-01-9	U	0.014	0.025	0.05	ug/l		8270 C-	05/27/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.0045	0.025	0.05	ug/l		8270 C-	05/27/15	1
Fluoranthene	206-44-0	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
Fluorene	86-73-7	U	0.009	0.025	0.05	ug/l		8270 C-	05/27/15	1
Indeno(1,2,3-cd)pyrene UJ MS-L	193-39-5	U	0.0074	0.025	0.05	ug/l		8270 C-	05/27/15	1
Naphthalene F SQL-+	91-20-3	0.082	0.012	0.025	0.25	ug/l	J	8270 C-	05/27/15	1
Phenanthrene	85-01-8	U	0.018	0.025	0.05	ug/l		8270 C-	05/27/15	1
Pyrene	129-00-0	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
1-Methylnaphthalene	90-12-0	U	0.018	0.025	0.25	ug/l		8270 C-	05/27/15	1
2-Methylnaphthalene	91-57-6	U	0.016	0.025	0.25	ug/l		8270 C-	05/27/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	68.1				% Rec.		8270 C-	05/27/15	1
2-Fluorobiphenyl	321-60-8	57.5				% Rec.		8270 C-	05/27/15	1
p-Terphenyl-d14	1718-51-0	64.9				% Rec.		8270 C-	05/27/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane UJ CCAL-L	111-91-1	U	0.47	7.2	14.3	ug/l		8270C	05/27/15	1.43
Bis(2-chloroethyl)ether UJ CCAL-L	111-44-4	U	2.3	7.2	14.3	ug/l		8270C	05/27/15	1.43
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.64	7.2	14.3	ug/l		8270C	05/27/15	1.43
Benzyl Alcohol	100-51-6	U	0.56	7.2	14.3	ug/l		8270C	05/27/15	1.43
Carbazole	86-74-8	U	0.37	7.2	14.3	ug/l		8270C	05/27/15	1.43
Benzoic acid	~~65-85-0~~	~~U~~ V	~~0.63~~ 0.63	~~7.2~~ 7.2	~~14.3~~ 14.3	~~ug/l~~	~~J3~~	~~8270C~~	~~05/27/15~~	~~1.43~~
Dibenzofuran	132-64-9	U	0.48	7.2	14.3	ug/l		8270C	05/27/15	1.43
4-Bromophenyl-phenylether	101-55-3	U	0.48	7.2	14.3	ug/l		8270C	05/27/15	1.43
2-Chloronaphthalene	91-58-7	U	0.47	0.72	1.43	ug/l		8270C	05/27/15	1.43
4-Chlorophenyl-phenylether	7005-72-3	U	0.43	7.2	14.3	ug/l		8270C	05/27/15	1.43
3,3-Dichlorobenzidine	91-94-1	U	2.9	7.2	14.3	ug/l		8270C	05/27/15	1.43
2,4-Dinitrotoluene	121-14-2	U	2.4	7.2	14.3	ug/l		8270C	05/27/15	1.43
2,6-Dinitrotoluene	606-20-2	U	0.4	7.2	14.3	ug/l		8270C	05/27/15	1.43
Hexachlorobenzene	118-74-1	U	0.49	0.72	1.43	ug/l		8270C	05/27/15	1.43
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.47~~	~~7.2~~	~~14.3~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.43~~
Hexachloroethane UJ CCAL-L	67-72-1	U	0.52	7.2	14.3	ug/l		8270C	05/27/15	1.43
Isophorone	78-59-1	U	0.39	7.2	14.3	ug/l		8270C	05/27/15	1.43
Nitrobenzene	98-95-3	U	0.52	7.2	14.3	ug/l		8270C	05/27/15	1.43
n-Nitrosodimethylamine	62-75-9	U	1.8	7.2	14.3	ug/l		8270C	05/27/15	1.43

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU515-MW04-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 13:37

ESC Sample # : L766918-06

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.43	7.2	14.3	ug/l		8270C	05/27/15	1.43
n-Nitrosodi-n-propylamine	621-64-7	U	0.58	7.2	14.3	ug/l		8270C	05/27/15	1.43
Benzylbutyl phthalate	85-68-7	U	0.39	1.4	4.29	ug/l		8270C	05/27/15	1.43
Bis(2-ethylhexyl)phthalate	117-81-7	U 1.4	1	1.4	4.29	ug/l		8270C	05/27/15	1.43
Di-n-butyl phthalate U MB-I	84-74-2	~~0.56~~	~~0.38~~ 0.56	1.4	4.29	ug/l	J	8270C	05/27/15	1.43
Diethyl phthalate	84-66-2	U	0.4	1.4	4.29	ug/l		8270C	05/27/15	1.43
Dimethyl phthalate U MB-I	131-11-3	1.4 ~~0.47~~	~~0.40~~ 0.47	1.4	4.29	ug/l	J	8270C	05/27/15	1.43
Di-n-octyl phthalate	117-84-0	U	0.4	1.4	4.29	ug/l		8270C	05/27/15	1.43
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.51~~	~~7.2~~	~~14.3~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.43~~
Acid Extractables										
4-Chloro-3-methylphenol ~~UR~~ UJ MS-L	59-50-7	U	0.38	7.2	14.3	ug/l		8270C	05/27/15	1.43
2-Chlorophenol	95-57-8	U	0.4	7.2	14.3	ug/l		8270C	05/27/15	1.43
2,4-Dichlorophenol UJ MS-L	120-83-2	U	0.41	7.2	14.3	ug/l		8270C	05/27/15	1.43
2,4-Dimethylphenol UJ MS-L	105-67-9	U	0.89	7.2	14.3	ug/l		8270C	05/27/15	1.43
4,6-Dinitro-2-methylphenol UJ CCAL-L	534-52-1	U	3.7	7.2	14.3	ug/l		8270C	05/27/15	1.43
2,4-Dinitrophenol	51-28-5	U	4.6	7.2	14.3	ug/l	J3	8270C	05/27/15	1.43
2-Methylphenol R	~~95-48-7~~	~~U~~	~~0.45~~	~~7.2~~	~~14.3~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.43~~
3&4-Methyl Phenol ~~UJ CCAL-LR~~	~~3&4-Methyl~~	~~U~~	~~0.38~~	~~7.2~~	~~14.3~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.43~~
2-Nitrophenol	88-75-5	U	0.46	7.2	14.3	ug/l		8270C	05/27/15	1.43
4-Nitrophenol	100-02-7	U	2.9	7.2	14.3	ug/l		8270C	05/27/15	1.43
4-Chloroaniline	106-47-8	U	0.55	7.2	14.3	ug/l		8270C	05/27/15	1.43
2-Nitroaniline	88-74-4	U	2.7	7.2	14.3	ug/l		8270C	05/27/15	1.43
3-Nitroaniline	99-09-2	U	0.44	7.2	14.3	ug/l		8270C	05/27/15	1.43
1,2-Diphenylhydrazine	103-33-3	U	0.45	7.2	14.3	ug/l		8270C	05/27/15	1.43
4-Nitroaniline	100-01-6	U	0.5	7.2	14.3	ug/l		8270C	05/27/15	1.43
Pentachlorophenol	87-86-5	U	0.45	7.2	14.3	ug/l		8270C	05/27/15	1.43
Phenol	108-95-2	U	0.48	7.2	14.3	ug/l		8270C	05/27/15	1.43
2,4,5-Trichlorophenol	95-95-4	U	0.34	7.2	14.3	ug/l		8270C	05/27/15	1.43
2,4,6-Trichlorophenol	88-06-2	U	0.42	7.2	14.3	ug/l		8270C	05/27/15	1.43
Surrogate Recovery										
2-Fluorophenol	367-12-4	51.3				% Rec.		8270C	05/27/15	1.43
Phenol-d5	4165-62-2	32.9				% Rec.		8270C	05/27/15	1.43
Nitrobenzene-d5	4165-60-0	62.8				% Rec.		8270C	05/27/15	1.43
2-Fluorobiphenyl	321-60-8	71.3				% Rec.		8270C	05/27/15	1.43
2,4,6-Tribromophenol	118-79-6	82.5				% Rec.		8270C	05/27/15	1.43
p-Terphenyl-d14	1718-51-0	68.9				% Rec.		8270C	05/27/15	1.43

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU503-MW04-ND01

Collected By : Jon Mallonee
Collection Date : 05/20/15 12:05

ESC Sample # : L766918-07

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Antimony,Dissolved F SQL-I	7440-36-0	0.87	0.21	0.50	2	ug/l	J	6020	05/29/15	1
Arsenic,Dissolved	7440-38-2	6.4	0.25	0.50	2	ug/l		6020	05/31/15	1
Barium,Dissolved	7440-39-3	42.	0.36	1.0	5	ug/l		6020	05/29/15	1
Beryllium,Dissolved	7440-41-7	U	0.12	0.50	2	ug/l		6020	05/29/15	1
Cadmium,Dissolved	7440-43-9	U	0.16	0.50	1	ug/l		6020	05/29/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.5	2	ug/l		6020	05/29/15	1
Copper,Dissolved F SQL+ICS-H	7440-50-8	2.0	0.52	1.5	5	ug/l	J	6020	05/29/15	1
Cobalt,Dissolved	7440-48-4	2.9	0.26	0.50	2	ug/l		6020	05/29/15	1
Lead,Dissolved F SQL-I	7439-92-1	1.3	0.24	0.50	2	ug/l	J	6020	05/29/15	1
Manganese,Dissolved	7439-96-5	420	0.25	0.50	5	ug/l		6020	05/29/15	1
Nickel,Dissolved	7440-02-0	5.1	0.35	1.0	2	ug/l		6020	05/29/15	1
Selenium,Dissolved	7782-49-2	22.	0.38	1.0	2	ug/l		6020	05/29/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.50	2	ug/l		6020	05/29/15	1
Thallium,Dissolved	7440-28-0	U	0.19	0.50	2	ug/l		6020	05/29/15	1
Vanadium,Dissolved	7440-62-2	36.	0.18	0.50	5	ug/l		6020	05/29/15	1
Zinc,Dissolved F SQL-I	7440-66-6	2.7	2.6	5.0	25	ug/l	J	6020	05/29/15	1
Mercury,Dissolved	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum,Dissolved	7429-90-5	U	35	50.	100	ug/l		6010B	05/31/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU503-MW04-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 12:05

ESC Sample # : L766918-08

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	13000000	2800	5000	10000	ug/l		2540 C-	05/27/15	1
Antimony F1 SQL ~~MS-M~~ -I	7440-36-0	0.76	0.21	0.50	2	ug/l	J	6020	06/01/15	1
Arsenic	7440-38-2	7.7	0.25	0.50	2	ug/l		6020	06/03/15	1
Barium	7440-39-3	43.	0.36	1.0	5	ug/l		6020	06/01/15	1
Beryllium	7440-41-7	U	0.12	0.50	2	ug/l		6020	06/01/15	1
Cadmium	7440-43-9	U	0.16	0.50	1	ug/l		6020	06/03/15	1
Chromium UJ MS-L	7440-47-3	U	0.54	1.5	2	ug/l		6020	06/03/15	1
Copper UMB,J MS-L	7440-50-8	3.0	~~0.52~~ 3.0	~~1.5~~ 3.0	5	ug/l	J	6020	06/01/15	1
Cobalt	7440-48-4	3.3	0.26	0.50	2	ug/l		6020	06/01/15	1
Lead	7439-92-1	U	0.24	0.50	2	ug/l		6020	06/01/15	1
Manganese	7439-96-5	430	0.25	0.50	5	ug/l		6020	06/01/15	1
Nickel J MS-L	7440-02-0	5.3	0.35	1.0	2	ug/l		6020	06/01/15	1
Selenium	7782-49-2	21.	0.38	1.0	2	ug/l		6020	06/01/15	1
Silver	7440-22-4	U	0.31	0.50	2	ug/l		6020	06/03/15	1
Thallium	7440-28-0	U	0.19	0.50	2	ug/l		6020	06/01/15	1
Vanadium	7440-62-2	38.	0.18	0.50	5	ug/l		6020	06/01/15	1
Zinc F1 SQL, ~~MS~~, MS-~~I~~L	7440-66-6	2.8	2.6	5.0	25	ug/l	J	6020	06/01/15	1
Mercury UJ MS-L	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum F1 SQL, MS-L	7429-90-5	93.	35	50.	100	ug/l	J	6010B	05/29/15	1
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l	J4	8260B	06/02/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	06/02/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l	J3	8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU503-MW04-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 12:05

ESC Sample # : L766918-08

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1
Methyl tert-butyl ether	1634-04-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.5~~	~~5~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	1
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Styrene R	~~100-42-5~~	~~U~~	~~0.31~~	~~0.50~~	~~1~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/02/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	06/02/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/02/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/02/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	107.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	110.				% Rec.		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU503-MW04-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 12:05

ESC Sample # : L766918-08

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	108.				% Rec.		8260B	06/02/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.008	0.025	0.05	ug/l		8270 C-	05/27/15	1
Acenaphthene	83-32-9	U	0.01	0.025	0.05	ug/l		8270 C-	05/27/15	1
Acenaphthylene	208-96-8	U	0.007	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(a)anthracene UJ MS-L	56-55-3	U	0.0083	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(a)pyrene	50-32-8	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(b)fluoranthene	205-99-2	U	0.0021	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(g,h,i)perylene	191-24-2	U	0.0023	0.025	0.05	ug/l		8270 C-	05/27/15	1
Benzo(k)fluoranthene	207-08-9	U	0.026	0.035	0.05	ug/l		8270 C-	05/27/15	1
Chrysene	218-01-9	U	0.014	0.025	0.05	ug/l		8270 C-	05/27/15	1
Dibenz(a,h)anthracene	53-70-3	U	0.0045	0.025	0.05	ug/l		8270 C-	05/27/15	1
Fluoranthene	206-44-0	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
Fluorene	86-73-7	0.10	0.009	0.025	0.05	ug/l		8270 C-	05/27/15	1
Indeno(1,2,3-cd)pyrene UJ MS-L	193-39-5	U	0.0074	0.025	0.05	ug/l		8270 C-	05/27/15	1
Naphthalene F SQL-I	91-20-3	0.014	0.012	0.025	0.25	ug/l	J	8270 C-	05/27/15	1
Phenanthrene	85-01-8	U	0.018	0.025	0.05	ug/l		8270 C-	05/27/15	1
Pyrene	129-00-0	U	0.016	0.025	0.05	ug/l		8270 C-	05/27/15	1
1-Methylnaphthalene	90-12-0	U	0.018	0.025	0.25	ug/l		8270 C-	05/27/15	1
2-Methylnaphthalene	91-57-6	U	0.016	0.025	0.25	ug/l		8270 C-	05/27/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	61.3				% Rec.		8270 C-	05/27/15	1
2-Fluorobiphenyl	321-60-8	54.3				% Rec.		8270 C-	05/27/15	1
p-Terphenyl-d14	1718-51-0	60.2				% Rec.		8270 C-	05/27/15	1
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane UJ CCAL-L	111-91-1	U	0.33	5.0	10	ug/l		8270C	05/27/15	1
Bis(2-chloroethyl)ether UJ CCAL-L	111-44-4	U	1.6	5.0	10	ug/l		8270C	05/27/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.44	5.0	10	ug/l		8270C	05/27/15	1
Benzyl Alcohol	100-51-6	U	0.39	5.0	10	ug/l		8270C	05/27/15	1
Carbazole	86-74-8	U	0.26	5.0	10	ug/l		8270C	05/27/15	1
Benzoic acid	65-85-0	U U	0.44 0.44	5.0 50	10 10	ug/l	J3	8270C	05/27/15	1
Dibenzofuran	132-64-9	U	0.34	5.0	10	ug/l		8270C	05/27/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.34	5.0	10	ug/l		8270C	05/27/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.50	1	ug/l		8270C	05/27/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.3	5.0	10	ug/l		8270C	05/27/15	1
3,3-Dichlorobenzidine	91-94-1	U	2	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dinitrotoluene	121-14-2	U	1.6	5.0	10	ug/l		8270C	05/27/15	1
2,6-Dinitrotoluene	606-20-2	U	0.28	5.0	10	ug/l		8270C	05/27/15	1
Hexachlorobenzene	118-74-1	U	0.34	0.50	1	ug/l		8270C	05/27/15	1
Hexachloro-1,3-butadiene DNR	87-68-3	U	0.33	5.0	10	ug/l		8270C	05/27/15	1
Hexachloroethane UJ CCAL-L	67-72-1	U	0.36	5.0	10	ug/l		8270C	05/27/15	1
Isophorone	78-59-1	U	0.27	5.0	10	ug/l		8270C	05/27/15	1
Nitrobenzene	98-95-3	U	0.37	5.0	10	ug/l		8270C	05/27/15	1
n-Nitrosodimethylamine	62-75-9	U	1.3	5.0	10	ug/l		8270C	05/27/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TU503-MW04-NT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 12:05

ESC Sample # : L766918-08

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.3	5.0	10	ug/l		8270C	05/27/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.4	5.0	10	ug/l		8270C	05/27/15	1
Benzylbutyl phthalate	85-68-7	U	0.28	1.0	3	ug/l		8270C	05/27/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.71	1.0	3	ug/l		8270C	05/27/15	1
Di-n-butyl phthalate u MB-I	84-74-2	1.2	~~0.27~~ 1.2	~~1.0~~ 1.2	3	ug/l	J	8270C	05/27/15	1
Diethyl phthalate	84-66-2	U	0.28	1.0	3	ug/l		8270C	05/27/15	1
Dimethyl phthalate u MB-I	131-11-3	~~0.43~~ 1.0	~~0.28~~ 0.43	1.0	3	ug/l	J	8270C	05/27/15	1
Di-n-octyl phthalate	117-84-0	U	0.28	1.0	3	ug/l		8270C	05/27/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.36~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol UJ MS-L	59-50-7	U	0.26	5.0	10	ug/l		8270C	05/27/15	1
2-Chlorophenol	95-57-8	U	0.28	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dichlorophenol UJ MS-L	120-83-2	U	0.28	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dimethylphenol UJ MS-L	105-67-9	U	0.62	5.0	10	ug/l		8270C	05/27/15	1
4,6-Dinitro-2-methylphenol UJ CCAL-L	534-52-1	U	2.6	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dinitrophenol	51-28-5	U	3.2	5.0	10	ug/l	J3	8270C	05/27/15	1
2-Methylphenol R	~~95-48-7~~	~~U~~	~~0.31~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	1
3&4-Methyl Phenol ~~UJ CCAL-L~~ R	~~3&4-Methyl~~	~~U~~	~~0.27~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	1
2-Nitrophenol	88-75-5	U	0.32	5.0	10	ug/l		8270C	05/27/15	1
4-Nitrophenol	100-02-7	U	2	5.0	10	ug/l		8270C	05/27/15	1
4-Chloroaniline	106-47-8	U	0.38	5.0	10	ug/l		8270C	05/27/15	1
2-Nitroaniline	88-74-4	U	1.9	5.0	10	ug/l		8270C	05/27/15	1
3-Nitroaniline	99-09-2	U	0.31	5.0	10	ug/l		8270C	05/27/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.32	5.0	10	ug/l		8270C	05/27/15	1
4-Nitroaniline	100-01-6	U	0.35	5.0	10	ug/l		8270C	05/27/15	1
Pentachlorophenol	87-86-5	U	0.31	5.0	10	ug/l		8270C	05/27/15	1
Phenol	108-95-2	U	0.33	5.0	10	ug/l		8270C	05/27/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.24	5.0	10	ug/l		8270C	05/27/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.3	5.0	10	ug/l		8270C	05/27/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	60.0				% Rec.		8270C	05/27/15	1
Phenol-d5	4165-62-2	39.9				% Rec.		8270C	05/27/15	1
Nitrobenzene-d5	4165-60-0	69.6				% Rec.		8270C	05/27/15	1
2-Fluorobiphenyl	321-60-8	80.1				% Rec.		8270C	05/27/15	1
2,4,6-Tribromophenol	118-79-6	95.0				% Rec.		8270C	05/27/15	1
p-Terphenyl-d14	1718-51-0	76.7				% Rec.		8270C	05/27/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 22, 2015
Description : Hollman AFB

Sample ID : H-TUQC-TRIPBLANK-TT01

Collected By : Jon Mallonee
Collection Date : 05/20/15 08:00

ESC Sample # : L766918-09

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.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform USCCAL-L	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l		8260B	06/02/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	06/02/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l		8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene USCCAL-L	87-68-3	U	0.26	0.50	1	ug/l	J4	8260B	06/02/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1

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

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L766918-09

Date Received : May 22, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-TUQC-TRIPBLANK-TT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/20/15 08:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Naphthalene UJ CCAL-L	91-20-3	U	1	2.5	5	ug/l		8260B	06/02/15	1
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Styrene	100-42-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene UJ CCAL-L	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/03/15	1
1,2,4-Trichlorobenzene UJ CCAL-L	120-82-1	U	0.36	0.50	1	ug/l	J4	8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	06/02/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/02/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/02/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	108.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	97.1				% Rec.		8260B	06/02/15	1
4-Bromofluorobenzene	460-00-4	113.				% Rec.		8260B	06/02/15	1

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Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L767115-01
Sampling Event Dates: May 21, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): Yes
Data Reviewer: Katie Abbot, URS Project Chemist
Date Completed: September 14, 2015
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							
				GRO	DRO/ORO	VOCs	PAHs	SVOCs	Dissolved Metals	Total Metals	TDS
L767115											
H-SS059-FIELDBLANK-FT01	FB	L767115-01	Water	---	---	X	--	--	---	---	---
H-SS059-MW52-DT01	FD	L767115-02	Water	---	---	X	X	X	---	X	X
H-SS059-MW52-DD01	FD	L767115-03	Water	---	---	---	---	---	X	---	---
H-SS059-MW52-ND01	SA	L767115-04	Water	---	---	---	---	---	X	---	---
H-SS059-MW52-NT01	SA	L767115-05	Water	---	---	X	X	X	---	X	X
H-SS059-MW51-ND01	SA	L767115-06	Water	---	---	---	---	---	X^m	--	--
H-SS059-MW51-NT01	SA	L767115-07	Water	---	---	X^m	X^m	X^m	---	X^m	X^m
H-SS059-MW50-ND01	SA	L767115-08	Water	---	---	---	---	---	X	--	--
H-SS059-MW50-NT01	SA	L767115-09	Water	---	---	X	X	X	--	X	X
H-TU506-MW05-NT-02	SA	L767115-10	Water	---	---	--	---	---	---	X*	X
H-TUQC-TRIPBLANK-TT02	TB	L767115-11	Water	---	---	X	--	--	---	---	---

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

Analyses:
DRO/ORO - Diesel and Oil Range Organics (8015D)
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)

*Analyzed for mercury and aluminum only

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	Yes	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 analysis of Method 6020 was canceled for sample H-TU506-MW05-NT-02 as it was not required. Further action was not necessary.
Reporting	Yes	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, and no results were changed. 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 are not reported by Method 8270C SVOCs but are reported by Method 8260B volatile organic compounds (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.

Review Parameter	Criteria Met?	Comment
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 H-SS059-MW51-ND01 (Dissolved 6020) H-SS059-MW51-NT01 (VOCS,PAHS,SVOCS, (Total 6020), TDS) • 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 5x the LOQ, the absolute difference between the results is compared against an evaluation criterion of 2xLOQ. The total metal sample results were compared with the associated dissolved sample results against the concentration-dependent criteria set forth in SOP 14.
Metals Only • Serial Dilution None in this data package • Post Digestion Spike None in this package	N/A	**Serial Dilution (Metals Only)** A serial dilution was not reported in association with the sample in this data package. **Post Digestion Spike (PDS) (Metals Only)** A post digestion spike was not reported in association with the sample in this data package.
Method Quality Control • Surrogates (VOCs, PAHs, SVOCs)	No	With the exceptions listed in Table 3, the surrogate recoveries were within the laboratory specified acceptance criteria
Field Quality Control • Trip Blank H-TUQC-TRIPBLANK-TT02 • Field Duplicate	Yes	**Trip Blank** Target analytes were not detected in the trip blank.

Review Parameter	Criteria Met?	Comment
H-SS059-MW52-NT01/ H-SS059-MW52-DT01 H-SS059-MW52-DD01/ H-SS059-MW52-ND01 • Equipment Blank None in this package • Field Blank H-SS059-FIELDBLANK-FT01		**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 >5x the LOQ 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 samples were reported as non-detect at elevated LODs. See Section 3.7 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 Polynuclear Aromatic Hydrocarbons (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)** 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** 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 exception 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) Quality Systems Manual (QSM) version 4.2 low level acceptance range of 80-120% and the method medium/high acceptance range of 90-110%. **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 5, 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

Review Parameter	Criteria Met?	Comment
		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 5 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 6, 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	With the exception of the 2-methylphenol, 3&4-methyl phenol, and styrene results, which were qualified as unusable due to MS/MSD recoveries <10%, and the acid compounds associated with sample H-SS059-MW51-NT01, which were qualified as unusable due to surrogate recoveries <10%, the results are usable as qualified for the project objective. The data are 95% 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
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
LOQ – Limit of Quantitation
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
N/A – 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
VOCs – Volatile Organic Compounds

Table 1: Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
Total Metals			
MB WG791805 H-SS059-MW52-DT01 H-SS09-MW52-NT01 H-SS059-MW51-NT01 H-SS059-MW50-NT01	Copper	0.780 µg/L	The associated results reported at concentrations <5x the concentration of the blank contamination were qualified as non-detect (U MB-I).
CCB 6/2/2015 10:26PM H-SS059-MW52-DT01	Lead	0.403 µg/L	None. The associated results were reported as non-detect.
	Zinc	11.5 µg/L	

Associated Samples	Analyte	Concentration	Qualification
Total Metals			
CCB 6/3/2015 1:21AM H-SS059-MW51-NT01	Lead	0.400 µg/L	The associated lead result was reported at a concentration <5x the concentration of the blank contamination and qualified as non-detect (U CCB-I).
	Antimony	0.236 µg/L	None. The associated antimony result was reported at a concentrations >5x the concentration of the blank contamination.
CCB 6/3/2015 1:21AM H-SS059-MW51-NT01	Lead	0.407 µg/L	The associated lead result was reported at a concentration <5x the concentration of the blank contamination and qualified as non-detect (U CCB-I).
	Antimony	0.280 µg/L	None. The associated antimony result was reported at a concentrations >5x the concentration of the blank contamination.
Dissolved Metals			
MB Batch WG791888 H-SS059-MW52-DD01 H-SS059-MW52-ND01 H-SS059-MW51-ND01 H-SS059-MW50-ND01	Vanadium	0.342 µg/L	None. The associated results were reported as non-detect or at concentrations >5x the concentration of the blank contamination.
VOCs			
MB Batch WG791367 H-SS059-FIELDBLANK-FT01 H-SS059-MW52-DT01 H-SS059-MW52-NT01 H-SS059-MW51-NT01 H-SS059-MW50-NT01 H-TUQC-TRIPBLANK-TT02	1,2,3-Trichlorobenzene	0.332 µg/L	None. The associated results were reported as non-detect.
	1,2,4-Trichlorobenzene	0.377 µg/L	
SVOCs			
MB Batch WG791571 H-SS059-MW51-NT01	Bis(2-ethylhexyl)phthalate	1.49 µg/L	None. The associated result was reported as non-detect.
	Di-n-butyl phthalate	0.538 µg/L	The associated result was reported at a concentration <5x the concentration of the blank contamination and was qualified as non-detect (U MB-I).
	Di-n-octyl phthalate	1.42 µg/L	None. The associated result was reported as non-detect.
PAHs			
MB Batch WG792025 H-SS059-MW52-DT01 H-SS059-MW52-NT01 H-SS059-MW51-NT01 H-SS059-MW50-NT01	Benzo(b)fluoranthene	0.00318 µg/L	The associated 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
VOCs – Volatile Organic Compounds

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

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
SVOCs				
H-SS059-MW51-NT01	2,4-Dichlorophenol	**45.6/42** (50-105)	8.38 (30)	As the potential bias was considered to be low, the associated analytes were qualified as estimated (UJ MS-L).
	2,4-Dimethylphenol	**11.9/9.99** (30-110)	17.4 (30)	
	4-Chloro-3-Methphenol	**36.7/33.2** (45-110)	9.8 (30)	
	2-Methylphenol	**11.8/8.19** (40-110)	**35.8** (30)	As the potential bias was considered to be low, and the %Rs were <10%, the associated non-detect results were qualified as unusable (R).
	3&4-Methyl Phenol	**9.27/6.36** (30-110)	**37.3** (30)	
VOCs				
H-SS059-MW51-NT01	Styrene	**0/0** (65-135)	**0** (30)	As the potential bias was considered to be low, and the %Rs were <10%, the associated non-detect results were qualified as unusable (R).
Mercury				
H-SS059-MW51-NT01	Mercury	**76**/87 (80-120)	14 (30)	As the potential bias was considered to be low, the associated analytes were qualified as estimated (UJ MS-L).
Total Metals				
H-SS059-MW51-NT01	Chromium, Total	**79**/87 (80-120)	14 (30)	As the potential bias was considered to be low, the associated analytes were qualified as estimated (UJ MS-L).
	Copper	**78**/80 (80-120)	2 (30)	
	Nickel	**79/79** (80-120)	1 (30)	
	Zinc	**73/75** (80-120)	2 (30)	
	Aluminum	**76**/101 (80-120)	19 (30)	
PAHs				
H-SS059-MW51-NT01	Benzo(a)anthracene	**27.1/24.9** (55-110)	8.6 (20)	As the potential bias was considered to be low, the associated analytes were qualified as estimated (UJ MS-L).
	Benzo(a)pyrene	**13.1/12.9** (55-110)	1.02 (20)	
	Benzo(b)fluoranthene	**11.8/10.1** (45-120)	14.9 (20)	
	Benzo(k)fluoranthene	**15.6/16.2** (55-110)	3.42 (20)	
	Chrysene	**30.8/29.2** (55-110)	5.39 (20)	

Associated Sample	Analyte	%R (Limits)	RPD (Limit)	Qualification
	Dibenz(a,h)anthracene	**11.4/11.5** (40-125)	0.62 (20)	
	Indeno(1,2,3-c,d)pyrene	**10.9/11.1** (45-125)	2.1 (20)	
	Benzo(g,h,i)perylene	**10.1/9.99** (40-125)	1.15 (20)	As the potential bias was considered to be low, and the %R was equal to and <10%, the associated non-detect result was qualified as estimated

< - Less Than
L – Low Bias
RPD – Relative Percent Difference
UJ – Estimated
% - Percent
MS/MSD – Matrix Spike Matrix Spike Duplicate
SVOCs – Semivolatile Organic Compounds
VOCs – Volatile Organic Compounds
%R – Percent Recoveries
R - Unusable
Bold indicates a recovery or RPD outside of acceptance limit

Table 3: Surrogate Recovery Outliers and Resultant Data Qualification

Sample	Surrogate	%R (Limits)	Qualification
VOCs			
H-SS059-MW51-NT01	4-Bromofluorobenzene	**123** (80.1-120)	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			
H-SS059-MW51-NT01	2-Fluorophenol	**2.05** (10-77.9)	As the potential bias was considered to be low, and the %Rs were <10%, the associated non-detect acid results were qualified as unusable (R).
	Phenol-d5	**1.51** (5-70.1)	
PAHs			
H-SS059-MW52-DT01	2-Fluorobiphenyl	**29.5** (38.8-115)	As the potential bias was considered to be low, the associated results were qualified as estimated (UJ/J SUR-L).
	P-Terphenyl-d14	**29.9** (33-9-128)	
H-SS059-MW52-NT01	2-Fluorobiphenyl	**27.8** (38.8-115)	
	P-Terphenyl-d14	**31.3** (33-9-128)	

< - Less Than
PAHs – Polynuclear Aromatic Hydrocarbons
SVOCSs – Semivolatile Organic Compounds
%R - Percent Recovery
R – Unusable
UJ/J – Estimated
L – Low Bias
SUR – Surrogate
VOCs – Volatile Organic Compounds
Bold indicates a recovery outside of acceptance limits.

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

Associated Samples	Analyte	%D (Limit)	Data Qualification
SVOCs			
H-SS059-MW52-DT01 H-SS059-MW52-NT01 H-SS059-MW50-NT01	3&4-Methyl Phenol	-51.8 (±20)	As all of the 3&4-methyl phenol results were qualified as unusable (R), further action was not necessary.
H-SS059-MW51-NT01		-51.3 (±20)	

± - Plus or minus
SVOCs – Semivolatile Organic Compounds
%D – Percent Difference
R - Unusable

Table 4: ICS Outliers and Resultant Data Qualification

Analyte	ICS A (µg/L)	DL (µg/L)	Qualified Samples	Qualification
Antimony	0.7	0.21	H-SS059-MW52-DT01 H-SS059-MW52-DD01 H-SS059-MW52-ND01 H-SS059-MW52-NT01	As the potential bias was considered to be high, the associated detected results were qualified as estimated (J ICS-H).
Antimony	0.7	0.21	H-SS059-MW51-ND01	
Cadmium	0.4	0.16		
Cadmium	0.4	0.16	H-SS059-MW51-NT01	
Antimony	0.7	0.21	H-SS059-MW50-ND01	
Cadmium	0.4	0.16		
Lead	0.4	0.24		
Antimony	0.7	0.21	H-SS059-MW50-NT01	

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

Table 5: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (Limits)	RPD (Limits)	Qualification
SVOCs				
LCS WG805815 H-SS059-FIELDBLANK-FT01 H-SS059-MW52-DT01 H-SS059-MW52-DD01 H-SS059-MW51-NT01 H-SS059-MW50-NT01 H-TUQC-TRIPBLANK-TT02	Chloroethane	**136/154** (60-135)	2.26 (30)	As the potential bias was considered to be high, and the associated chloroethane results were reported as non-detect, data qualification was not considered necessary.

%R – Percent Recoveries LCS – Laboratory Control Sample RPD – Relative Percent Difference
SVOCs – Semivolatile Organic Compounds
Bold indicates a recovery outside of acceptance limits.

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-01

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-FIELDBLANK-FT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 17:13

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l	J4	8260B	06/02/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	06/02/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l	J3	8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene F SOL-I	100-41-4	0.75	0.38	0.50	1	ug/l	J	8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
p-Isopropyltoluene F SOL-I	99-87-6	0.51	0.35	0.50	1	ug/l	J	8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-01

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-FIELDBLANK-FT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 17:13

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Methyl tert-butyl ether	1634-04-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Naphthalene	91-20-3	U	1	2.5	5	ug/l		8260B	06/04/15	1
n-Propylbenzene F-SQL-I	103-65-1	0.52	0.35	0.50	1	ug/l	J	8260B	06/02/15	1
Styrene	100-42-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/02/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	06/04/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	06/04/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/04/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/04/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	110.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	114.				% Rec.		8260B	06/02/15	1
4-Bromofluorobenzene	460-00-4	119.				% Rec.		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 23, 2015
Description : Hollman AFB

Sample ID : H-SS059-MW52-DT01

Collected By : Jon Mallonee
Collection Date : 05/21/15 12:28

ESC Sample # : L767115-02

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	15000000	2800	5000	10000	ug/l		2540 C-	05/30/15	1
Antimony FJ SQL, ICSAH	7440-36-0	0.24	0.21	0.50	2	ug/l	J	6020	06/01/15	1
Arsenic	7440-38-2	42.	0.25	0.50	2	ug/l		6020	06/03/15	1
Barium	7440-39-3	52.	0.36	1.0	5	ug/l		6020	06/01/15	1
Beryllium	7440-41-7	U	0.12	0.50	2	ug/l		6020	06/01/15	1
Cadmium	7440-43-9	U	0.16	0.50	1	ug/l		6020	06/03/15	1
Chromium UJ MS-L	7440-47-3	U	0.54	1.5	2	ug/l		6020	06/03/15	1
Copper UJ MS-L	7440-50-8	U	0.52	1.5	5	ug/l		6020	06/01/15	1
Cobalt	7440-48-4	14.	0.26	0.50	2	ug/l		6020	06/01/15	1
Lead	7439-92-1	U	0.24	0.50	2	ug/l		6020	06/01/15	1
Manganese	7439-96-5	2100	0.25	0.50	5	ug/l		6020	06/01/15	1
Nickel J MS-L	7440-02-0	9.1	0.35	1.0	2	ug/l		6020	06/01/15	1
Selenium F SQL-I	7782-49-2	1.4	0.38	1.0	2	ug/l	J	6020	06/01/15	1
Silver	7440-22-4	U	0.31	0.50	2	ug/l		6020	06/03/15	1
Thallium	7440-28-0	U	0.19	0.50	2	ug/l		6020	06/01/15	1
Vanadium	7440-62-2	9.6	0.18	0.50	5	ug/l		6020	06/01/15	1
Zinc UJ MS-L	7440-66-6	U	2.6	5.0	25	ug/l		6020	06/01/15	1
Mercury UJ MS-L	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/27/15	1
Aluminum UJ MS-L	7429-90-5	U	180	250	500	ug/l		6010B	05/29/15	5
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene F SQL-I	98-06-6	0.67	0.4	0.50	1	ug/l	J	8260B	06/02/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l	J4	8260B	06/02/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	06/02/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l	J3	8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-02

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW52-DT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 12:28

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
p-Isopropyltoluene U PB-I	99-87-6	0.53	~~0.35~~ 0.53	~~0.50~~ 0.53	1	ug/l	J	8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1
Methyl tert-butyl ether	1634-04-4	1.2	0.37	0.50	1	ug/l		8260B	06/02/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.5~~	~~5~~	~~ug/l~~		~~8260B~~	~~06/04/15~~	1
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Styrene R	~~100-42-5~~	~~U~~	~~0.31~~	~~0.50~~	~~1~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	~~1~~
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/02/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	1.3	0.37	0.50	1	ug/l		8260B	06/04/15	1
1,3,5-Trimethylbenzene	108-67-8	1.3	0.39	0.50	1	ug/l		8260B	06/04/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/04/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/02/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	107.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	110.				% Rec.		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 23, 2015
Description : Hollman AFB

Sample ID : H-SS059-MW52-DT01

Collected By : Jon Mallonee
Collection Date : 05/21/15 12:28

ESC Sample # : L767115-02

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	108.				% Rec.		8260B	06/02/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene UJ SUR, ~~MS~~-L	120-12-7	U	0.0089	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Acenaphthene FJ SQL, SUR, ~~MS~~-L	83-32-9	0.031	0.011	0.028	0.0555	ug/l	J	8270 C-	05/29/15	1.11
Acenaphthylene UJ SUR, ~~MS~~-L	208-96-8	U	0.0078	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(a)anthracene UJ SUR, MS-L	56-55-3	U	0.0092	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(a)pyrene	50-32-8	U	0.018	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(b)fluoranthene UJ MB, MS, SUR-L	205-99-2	~~0.0025~~ 0.028	~~0.0024~~ 0.0021	0.028	0.0555	ug/l	J	8270 C-	05/29/15	1.11
Benzo(g,h,i)perylene UJ SUR, MS-L	191-24-2	U	0.0025	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(k)fluoranthene	207-08-9	U	0.028	0.039	0.0555	ug/l		8270 C-	05/29/15	1.11
Chrysene	218-01-9	U	0.016	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Dibenz(a,h)anthracene	53-70-3	U	0.005	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Fluoranthene UJ SUR-L	206-44-0	U	0.018	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Fluorene	86-73-7	U	0.01	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Indeno(1,2,3-cd)pyrene UJ SUR, MS-L	193-39-5	U	0.0082	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Naphthalene FJ SQL, SUR, ~~MS~~-L	91-20-3	0.17	0.013	0.028	0.2775	ug/l	J	8270 C-	05/29/15	1.11
Phenanthrene UJ SUR, ~~MS~~-L	85-01-8	U	0.02	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Pyrene	129-00-0	U	0.017	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
1-Methylnaphthalene FJ SQL, SUR, ~~MS~~-L	90-12-0	0.059	0.02	0.028	0.2775	ug/l	J	8270 C-	05/29/15	1.11
2-Methylnaphthalene	91-57-6	0.11	0.017	0.028	0.2775	ug/l	J	8270 C-	05/29/15	1.11
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	42.8				% Rec.		8270 C-	05/29/15	1.11
2-Fluorobiphenyl	321-60-8	29.5				% Rec.	J2	8270 C-	05/29/15	1.11
p-Terphenyl-d14	1718-51-0	29.9				% Rec.	J2	8270 C-	05/29/15	1.11
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.41	6.3	12.5	ug/l		8270C	05/27/15	1.25
Bis(2-chloroethyl)ether	111-44-4	U	2	6.3	12.5	ug/l		8270C	05/27/15	1.25
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.56	6.3	12.5	ug/l		8270C	05/27/15	1.25
Benzyl Alcohol	100-51-6	U	0.49	6.3	12.5	ug/l		8270C	05/27/15	1.25
Carbazole	86-74-8	U	0.32	6.3	12.5	ug/l		8270C	05/27/15	1.25
Benzoic acid	65-85-0	U	0.55	6.3	12.5	ug/l	J3	8270C	05/27/15	1.25
Dibenzofuran F SQL-I	132-64-9	0.56	0.42	6.3	12.5	ug/l	J	8270C	05/27/15	1.25
4-Bromophenyl-phenylether	101-55-3	U	0.42	6.3	12.5	ug/l		8270C	05/27/15	1.25
2-Chloronaphthalene	91-58-7	U	0.41	0.63	1.25	ug/l		8270C	05/27/15	1.25
4-Chlorophenyl-phenylether	7005-72-3	U	0.38	6.3	12.5	ug/l		8270C	05/27/15	1.25
3,3-Dichlorobenzidine	91-94-1	U	2.5	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dinitrotoluene	121-14-2	U	2.1	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,6-Dinitrotoluene	606-20-2	U	0.35	6.3	12.5	ug/l		8270C	05/27/15	1.25
Hexachlorobenzene	118-74-1	U	0.43	0.63	1.25	ug/l		8270C	05/27/15	1.25
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.41~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1.25~~
Hexachloroethane	67-72-1	U	0.46	6.3	12.5	ug/l		8270C	05/27/15	1.25
Isophorone F SQL-I	78-59-1	0.89	0.34	6.3	12.5	ug/l	J	8270C	05/27/15	1.25
Nitrobenzene	98-95-3	U	0.46	6.3	12.5	ug/l		8270C	05/27/15	1.25
n-Nitrosodimethylamine	62-75-9	U	1.6	6.3	12.5	ug/l		8270C	05/27/15	1.25

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-02

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW52-DT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 12:28

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.38	6.3	12.5	ug/l		8270C	05/27/15	1.25
n-Nitrosodi-n-propylamine	621-64-7	U	0.5	6.3	12.5	ug/l		8270C	05/27/15	1.25
Benzylbutyl phthalate	85-68-7	U	0.34	1.3	3.75	ug/l		8270C	05/27/15	1.25
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.89	1.3	3.75	ug/l		8270C	05/27/15	1.25
Di-n-butyl phthalate FSQL-I	84-74-2	0.53	0.33	1.3	3.75	ug/l	J	8270C	05/27/15	1.25
Diethyl phthalate	84-66-2	U	0.35	1.3	3.75	ug/l		8270C	05/27/15	1.25
Dimethyl phthalate	131-11-3	U	0.35	1.3	3.75	ug/l		8270C	05/27/15	1.25
Di-n-octyl phthalate	117-84-0	U	0.35	1.3	3.75	ug/l		8270C	05/27/15	1.25
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.44~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	1.25
Acid Extractables										
4-Chloro-3-methylphenol UJ MS-L	59-50-7	U	0.33	6.3	12.5	ug/l		8270C	05/27/15	1.25
2-Chlorophenol	95-57-8	U	0.35	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dichlorophenol UJ MS-L	120-83-2	U	0.36	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dimethylphenol	105-67-9	U	0.78	6.3	12.5	ug/l		8270C	05/27/15	1.25
4,6-Dinitro-2-methylphenol	534-52-1	U	3.3	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4-Dinitrophenol	51-28-5	U	4.1	6.3	12.5	ug/l		8270C	05/27/15	1.25
2-Methylphenol R	~~95-48-7~~	~~U~~	~~0.39~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	1.25
3&4-Methyl Phenol R	~~3&4-Methyl~~	~~U~~	~~0.33~~	~~6.3~~	~~12.5~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	1.25
2-Nitrophenol	88-75-5	U	0.4	6.3	12.5	ug/l		8270C	05/27/15	1.25
4-Nitrophenol	100-02-7	U	2.5	6.3	12.5	ug/l	J3	8270C	05/27/15	1.25
4-Chloroaniline	106-47-8	U	0.48	6.3	12.5	ug/l		8270C	05/27/15	1.25
2-Nitroaniline	88-74-4	U	2.4	6.3	12.5	ug/l		8270C	05/27/15	1.25
3-Nitroaniline	99-09-2	U	0.38	6.3	12.5	ug/l		8270C	05/27/15	1.25
1,2-Diphenylhydrazine	103-33-3	U	0.4	6.3	12.5	ug/l		8270C	05/27/15	1.25
4-Nitroaniline	100-01-6	U	0.44	6.3	12.5	ug/l		8270C	05/27/15	1.25
Pentachlorophenol	87-86-5	U	0.39	6.3	12.5	ug/l		8270C	05/27/15	1.25
Phenol	108-95-2	U	0.42	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4,5-Trichlorophenol	95-95-4	U	0.3	6.3	12.5	ug/l		8270C	05/27/15	1.25
2,4,6-Trichlorophenol	88-06-2	U	0.37	6.3	12.5	ug/l		8270C	05/27/15	1.25
Surrogate Recovery										
2-Fluorophenol	367-12-4	74.6				% Rec.		8270C	05/27/15	1.25
Phenol-d5	4165-62-2	64.3				% Rec.		8270C	05/27/15	1.25
Nitrobenzene-d5	4165-60-0	101.				% Rec.		8270C	05/27/15	1.25
2-Fluorobiphenyl	321-60-8	93.1				% Rec.		8270C	05/27/15	1.25
2,4,6-Tribromophenol	118-79-6	117.				% Rec.		8270C	05/27/15	1.25
p-Terphenyl-d14	1718-51-0	84.9				% Rec.		8270C	05/27/15	1.25

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-03

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW52-DD01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 12:28

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Antimony,Dissolved FS SOL,ICS-A	7440-36-0	0.33	0.21	0.50	2	ug/l	J	6020	05/29/15	1
Arsenic,Dissolved	7440-38-2	33.	0.25	0.50	2	ug/l		6020	05/31/15	1
Barium,Dissolved	7440-39-3	49.	0.36	1.0	5	ug/l		6020	05/29/15	1
Beryllium,Dissolved	7440-41-7	U	0.12	0.50	2	ug/l		6020	05/29/15	1
Cadmium,Dissolved	7440-43-9	U	0.16	0.50	1	ug/l		6020	05/29/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.5	2	ug/l		6020	05/29/15	1
Copper,Dissolved	7440-50-8	U	0.52	1.5	5	ug/l		6020	05/29/15	1
Cobalt,Dissolved	7440-48-4	13.	0.26	0.50	2	ug/l		6020	05/29/15	1
Lead,Dissolved	7439-92-1	U	0.24	0.50	2	ug/l		6020	05/29/15	1
Manganese,Dissolved	7439-96-5	2100	0.25	0.50	5	ug/l		6020	05/29/15	1
Nickel,Dissolved	7440-02-0	8.0	0.35	1.0	2	ug/l		6020	05/29/15	1
Selenium,Dissolved F SOL-I	7782-49-2	1.3	0.38	1.0	2	ug/l	J	6020	05/29/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.50	2	ug/l		6020	05/29/15	1
Thallium,Dissolved	7440-28-0	U	0.19	0.50	2	ug/l		6020	05/29/15	1
Vanadium,Dissolved	7440-62-2	8.9	0.18	0.50	5	ug/l		6020	05/29/15	1
Zinc,Dissolved F SOL-I	7440-66-6	2.7	2.6	5.0	25	ug/l	J	6020	05/29/15	1
Mercury,Dissolved	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum,Dissolved F SOL-I	7429-90-5	84.	35	50.	100	ug/l	J	6010B	05/31/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-04

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW52-ND01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 12:28

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Antimony,Dissolved FJ SOL,ICS-H	7440-36-0	0.34	0.21	0.50	2	ug/l	J	6020	05/29/15	1
Arsenic,Dissolved	7440-38-2	35.	0.25	0.50	2	ug/l		6020	05/31/15	1
Barium,Dissolved	7440-39-3	50.	0.36	1.0	5	ug/l		6020	05/29/15	1
Beryllium,Dissolved	7440-41-7	U	0.12	0.50	2	ug/l		6020	05/29/15	1
Cadmium,Dissolved	7440-43-9	U	0.16	0.50	1	ug/l		6020	05/29/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.5	2	ug/l		6020	05/29/15	1
Copper,Dissolved	7440-50-8	U	0.52	1.5	5	ug/l		6020	05/29/15	1
Cobalt,Dissolved	7440-48-4	13.	0.26	0.50	2	ug/l		6020	05/29/15	1
Lead,Dissolved	7439-92-1	U	0.24	0.50	2	ug/l		6020	05/29/15	1
Manganese,Dissolved	7439-96-5	2000	0.25	0.50	5	ug/l		6020	05/29/15	1
Nickel,Dissolved	7440-02-0	8.1	0.35	1.0	2	ug/l		6020	05/29/15	1
Selenium,Dissolved F SOL -1	7782-49-2	1.4	0.38	1.0	2	ug/l	J	6020	05/29/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.50	2	ug/l		6020	05/29/15	1
Thallium,Dissolved	7440-28-0	U	0.19	0.50	2	ug/l		6020	05/29/15	1
Vanadium,Dissolved	7440-62-2	8.6	0.18	0.50	5	ug/l		6020	05/29/15	1
Zinc,Dissolved	7440-66-6	U	2.6	5.0	25	ug/l		6020	05/29/15	1
Mercury,Dissolved	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum,Dissolved	7429-90-5	U	35	50.	100	ug/l		6010B	05/31/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-05

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW52-NT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 12:28

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	14000000	2800	5000	10000	ug/l		2540 C-	05/30/15	1
Antimony FJ SQL, ICS-H	7440-36-0	0.28	0.21	0.50	2	ug/l	J	6020	06/01/15	1
Arsenic	7440-38-2	41.	0.25	0.50	2	ug/l		6020	06/03/15	1
Barium	7440-39-3	52.	0.36	1.0	5	ug/l		6020	06/01/15	1
Beryllium	7440-41-7	U	0.12	0.50	2	ug/l		6020	06/01/15	1
Cadmium ~~UJ ICS~~	7440-43-9	U	0.16	0.50	1	ug/l		6020	06/03/15	1
Chromium UJ MS-L	7440-47-3	U	0.54	1.5	2	ug/l		6020	06/03/15	1
Copper UJ MB-I MS-L	7440-50-8	~~0.82~~ 1.5	~~0.52~~ 0.82	1.5	5	ug/l	J	6020	06/01/15	1
Cobalt	7440-48-4	14.	0.26	0.50	2	ug/l		6020	06/01/15	1
Lead	7439-92-1	U	0.24	0.50	2	ug/l		6020	06/01/15	1
Manganese	7439-96-5	2100	0.25	0.50	5	ug/l		6020	06/01/15	1
Nickel J MS-L	7440-02-0	8.9	0.35	1.0	2	ug/l		6020	06/01/15	1
Selenium F SQL-I	7782-49-2	1.3	0.38	1.0	2	ug/l	J	6020	06/01/15	1
Silver	7440-22-4	U	0.31	0.50	2	ug/l		6020	06/03/15	1
Thallium	7440-28-0	U	0.19	0.50	2	ug/l		6020	06/01/15	1
Vanadium	7440-62-2	9.5	0.18	0.50	5	ug/l		6020	06/01/15	1
Zinc UJ MS-L	7440-66-6	U	2.6	5.0	25	ug/l		6020	06/01/15	1
Mercury UJ MS-L	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/27/15	1
Aluminum FJ SQL, MS-L	7429-90-5	400	180	250	500	ug/l	J	6010B	05/29/15	5
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene F SQL-I	98-06-6	0.74	0.4	0.50	1	ug/l	J	8260B	06/02/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l	J4	8260B	06/02/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	06/02/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l	J3	8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1

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Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 12:28

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
p-Isopropyltoluene U PB-I	99-87-6	~~0.40~~ 0.56	~~0.35~~ 0.40	0.50	1	ug/l	J	8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1
Methyl tert-butyl ether	1634-04-4	1.2	0.37	0.50	1	ug/l		8260B	06/02/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.5~~	~~5~~	~~ug/l~~		~~8260B~~	~~06/04/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Styrene R	~~100-42-5~~	~~U~~	~~0.31~~	~~0.50~~	~~1~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	~~1~~
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/02/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	1.3	0.37	0.50	1	ug/l		8260B	06/04/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	06/02/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/02/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/02/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	106.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	107.				% Rec.		8260B	06/02/15	1

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Denver, CO 80237

June 25, 2015

Date Received : May 23, 2015
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Sample ID : H-SS059-MW52-NT01

Collected By : Jon Mallonee
Collection Date : 05/21/15 12:28

ESC Sample # : L767115-05

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	102.				% Rec.		8260B	06/02/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene UJ SUR, ~~MS~~-L	120-12-7	U	0.0089	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Acenaphthene FJ SOL, SUR, ~~MS~~-L	83-32-9	0.031	0.011	0.028	0.0555	ug/l	J	8270 C-	05/29/15	1.11
Acenaphthylene UJ SUR-L	208-96-8	U	0.0078	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(a)anthracene UJ SUR, MS-L	56-55-3	U	0.0092	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(a)pyrene	50-32-8	U	0.018	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(b)fluoranthene UJ MB, SUR, MS-L	205-99-2	~~0.0024~~ 0.028	0.0024	0.028	0.0555	ug/l	J	8270 C-	05/29/15	1.11
Benzo(g,h,i)perylene UJ SUR, MS-L	191-24-2	U	0.0025	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(k)fluoranthene	207-08-9	U	0.028	0.039	0.0555	ug/l		8270 C-	05/29/15	1.11
Chrysene	218-01-9	U	0.016	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Dibenz(a,h)anthracene	53-70-3	U	0.005	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Fluoranthene UJ SUR-L	206-44-0	U	0.018	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Fluorene	86-73-7	U	0.01	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Indeno(1,2,3-cd)pyrene UJ SUR, MS-L	193-39-5	U	0.0082	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Naphthalene FJ SOL, ~~MS~~ SUR, ~~MS~~-L	91-20-3	0.27	0.013	0.028	0.2775	ug/l	J	8270 C-	05/29/15	1.11
Phenanthrene UJ SUR-L	85-01-8	U	0.02	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Pyrene	129-00-0	U	0.017	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
1-Methylnaphthalene FJ SOL, SUR, ~~MS~~-L	90-12-0	0.061	0.02	0.028	0.2775	ug/l	J	8270 C-	05/29/15	1.11
2-Methylnaphthalene	91-57-6	0.11	0.017	0.028	0.2775	ug/l	J	8270 C-	05/29/15	1.11
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	46.7				% Rec.		8270 C-	05/29/15	1.11
2-Fluorobiphenyl	321-60-8	27.8				% Rec.	J2	8270 C-	05/29/15	1.11
p-Terphenyl-d14	1718-51-0	31.3				% Rec.	J2	8270 C-	05/29/15	1.11
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.33	5.0	10	ug/l		8270C	05/27/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.6	5.0	10	ug/l		8270C	05/27/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.44	5.0	10	ug/l		8270C	05/27/15	1
Benzyl Alcohol	100-51-6	U	0.39	5.0	10	ug/l		8270C	05/27/15	1
Carbazole	86-74-8	U	0.26	5.0	10	ug/l		8270C	05/27/15	1
Benzoic acid	65-85-0	U	0.44	5.0	10	ug/l	J3	8270C	05/27/15	1
Dibenzofuran F SOL-I	132-64-9	0.49	0.34	5.0	10	ug/l	J	8270C	05/27/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.34	5.0	10	ug/l		8270C	05/27/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.50	1	ug/l		8270C	05/27/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.3	5.0	10	ug/l		8270C	05/27/15	1
3,3-Dichlorobenzidine	91-94-1	U	2	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dinitrotoluene	121-14-2	U	1.6	5.0	10	ug/l		8270C	05/27/15	1
2,6-Dinitrotoluene	606-20-2	U	0.28	5.0	10	ug/l		8270C	05/27/15	1
Hexachlorobenzene	118-74-1	U	0.34	0.50	1	ug/l		8270C	05/27/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.33~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.36	5.0	10	ug/l		8270C	05/27/15	1
Isophorone F SOL-I	78-59-1	0.72	0.27	5.0	10	ug/l	J	8270C	05/27/15	1
Nitrobenzene	98-95-3	U	0.37	5.0	10	ug/l		8270C	05/27/15	1
n-Nitrosodimethylamine	62-75-9	U	1.3	5.0	10	ug/l		8270C	05/27/15	1

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n-Nitrosodiphenylamine	86-30-6	U	0.3	5.0	10	ug/l		8270C	05/27/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.4	5.0	10	ug/l		8270C	05/27/15	1
Benzylbutyl phthalate	85-68-7	U	0.28	1.0	3	ug/l		8270C	05/27/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.71	1.0	3	ug/l		8270C	05/27/15	1
Di-n-butyl phthalate FSQL-I	84-74-2	0.32	0.27	1.0	3	ug/l	J	8270C	05/27/15	1
Diethyl phthalate	84-66-2	U	0.28	1.0	3	ug/l		8270C	05/27/15	1
Dimethyl phthalate FSQL-I	131-11-3	0.28	0.28	1.0	3	ug/l	J	8270C	05/27/15	1
Di-n-octyl phthalate	117-84-0	U	0.28	1.0	3	ug/l		8270C	05/27/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.36~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	1
Acid Extractables										
4-Chloro-3-methylphenol UJ MS-L	59-50-7	U	0.26	5.0	10	ug/l		8270C	05/27/15	1
2-Chlorophenol	95-57-8	U	0.28	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dichlorophenol UJ MS-L	120-83-2	U	0.28	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dimethylphenol UJ MS-L	105-67-9	U	0.62	5.0	10	ug/l		8270C	05/27/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.6	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dinitrophenol	51-28-5	U	3.2	5.0	10	ug/l		8270C	05/27/15	1
2-Methylphenol R	~~95-48-7~~	~~U~~	~~0.31~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	1
3&4-Methyl Phenol R	~~3&4-Methyl~~	~~U~~	~~0.27~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	1
2-Nitrophenol	88-75-5	U	0.32	5.0	10	ug/l		8270C	05/27/15	1
4-Nitrophenol	100-02-7	U	2	5.0	10	ug/l	J3	8270C	05/27/15	1
4-Chloroaniline	106-47-8	U	0.38	5.0	10	ug/l		8270C	05/27/15	1
2-Nitroaniline	88-74-4	U	1.9	5.0	10	ug/l		8270C	05/27/15	1
3-Nitroaniline	99-09-2	U	0.31	5.0	10	ug/l		8270C	05/27/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.32	5.0	10	ug/l		8270C	05/27/15	1
4-Nitroaniline	100-01-6	U	0.35	5.0	10	ug/l		8270C	05/27/15	1
Pentachlorophenol	87-86-5	U	0.31	5.0	10	ug/l		8270C	05/27/15	1
Phenol	108-95-2	U	0.33	5.0	10	ug/l		8270C	05/27/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.24	5.0	10	ug/l		8270C	05/27/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.3	5.0	10	ug/l		8270C	05/27/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	58.6				% Rec.		8270C	05/27/15	1
Phenol-d5	4165-62-2	48.0				% Rec.		8270C	05/27/15	1
Nitrobenzene-d5	4165-60-0	81.2				% Rec.		8270C	05/27/15	1
2-Fluorobiphenyl	321-60-8	67.8				% Rec.		8270C	05/27/15	1
2,4,6-Tribromophenol	118-79-6	87.5				% Rec.		8270C	05/27/15	1
p-Terphenyl-d14	1718-51-0	61.4				% Rec.		8270C	05/27/15	1

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DNR: Do Not Report

BMS 1-115

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-06

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW51-ND01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 15:28

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Antimony, Dissolved FS SQL, ICS-H	7440-36-0	0.44	0.21	0.50	2	ug/l	J	6020	05/29/15	1
Arsenic, Dissolved	7440-38-2	2.7	0.25	0.50	2	ug/l		6020	05/31/15	1
Barium, Dissolved	7440-39-3	60.	0.36	1.0	5	ug/l		6020	05/29/15	1
Beryllium, Dissolved	7440-41-7	U	0.12	0.50	2	ug/l		6020	05/29/15	1
Cadmium, Dissolved FS SQL, ICS-H	7440-43-9	0.21	0.16	0.50	1	ug/l	J	6020	05/29/15	1
Chromium, Dissolved	7440-47-3	U	0.54	1.5	2	ug/l		6020	05/29/15	1
Copper, Dissolved F SQL -I	7440-50-8	0.97	0.52	1.5	5	ug/l	J	6020	05/29/15	1
Cobalt, Dissolved	7440-48-4	3.0	0.26	0.50	2	ug/l		6020	05/29/15	1
Lead, Dissolved	7439-92-1	U	0.24	0.50	2	ug/l		6020	05/29/15	1
Manganese, Dissolved	7439-96-5	590	0.25	0.50	5	ug/l		6020	05/29/15	1
Nickel, Dissolved	7440-02-0	7.8	0.35	1.0	2	ug/l		6020	05/29/15	1
Selenium, Dissolved	7782-49-2	7.0	0.38	1.0	2	ug/l		6020	05/29/15	1
Silver, Dissolved	7440-22-4	U	0.31	0.50	2	ug/l		6020	05/29/15	1
Thallium, Dissolved	7440-28-0	U	0.19	0.50	2	ug/l		6020	05/29/15	1
Vanadium, Dissolved	7440-62-2	7.6	0.18	0.50	5	ug/l		6020	05/29/15	1
Zinc, Dissolved	7440-66-6	U	2.6	5.0	25	ug/l		6020	05/29/15	1
Mercury, Dissolved	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum, Dissolved	7429-90-5	110	35	50.	100	ug/l		6010B	05/31/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 23, 2015
Description : Hollman AFB

Sample ID : H-SS059-MW51-NT01

Collected By : Jon Mallonee
Collection Date : 05/21/15 15:28

ESC Sample # : L767115-07

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	15000000	2800	5000	10000	ug/l		2540 C-	05/30/15	1
Antimony ~~J ICSA H~~	7440-36-0	3.1	0.21	0.50	2	ug/l		6020	06/03/15	1
Arsenic	7440-38-2	3.0	0.25	0.50	2	ug/l		6020	06/03/15	1
Barium	7440-39-3	65.	0.36	1.0	5	ug/l		6020	06/03/15	1
Beryllium	7440-41-7	U	0.12	0.50	2	ug/l		6020	06/03/15	1
Cadmium FJ SQL, ICS-H	7440-43-9	0.17	0.16	0.50	1	ug/l	J	6020	06/03/15	1
Chromium UJ MS-L	7440-47-3	U	0.54	1.5	2	ug/l		6020	06/03/15	1
Copper ~~UJMB-I~~, MS-L	7440-50-8	~~1.3~~ 1.5	~~0.52~~ 1.3	1.5	5	ug/l	J	6020	06/03/15	1
Cobalt	7440-48-4	2.6	0.26	0.50	2	ug/l		6020	06/03/15	1
Lead U CCB-I	7439-92-1	~~0.260~~ 0.50	~~0.240~~ 0.26	0.50	2	ug/l	J	6020	06/03/15	1
Manganese	7439-96-5	480	0.25	0.50	5	ug/l	V	6020	06/03/15	1
Nickel UJ MS-L	7440-02-0	7.1	0.35	1.0	2	ug/l		6020	06/03/15	1
Selenium	7782-49-2	7.6	0.38	1.0	2	ug/l		6020	06/03/15	1
Silver	7440-22-4	U	0.31	0.50	2	ug/l		6020	06/03/15	1
Thallium	7440-28-0	U	0.19	0.50	2	ug/l		6020	06/03/15	1
Vanadium	7440-62-2	7.7	0.18	0.50	5	ug/l		6020	06/03/15	1
Zinc ~~UJ MS-L~~ FJ SQL, MS-L	7440-66-6	2.9	2.6	5.0	25	ug/l	JJ6	6020	06/03/15	1
Mercury UJ MS-L	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/27/15	1
Aluminum ~~J MS-L~~ FJ SQL, MS-L	7429-90-5	410	180	250	500	ug/l	J	6010B	05/29/15	5
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l	J4	8260B	06/02/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	06/02/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l		8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l	J3	8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-07

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW51-NT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 15:28

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1
Methyl tert-butyl ether	1634-04-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.5~~	~~5~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Styrene R	~~100-42-5~~	~~U~~	~~0.31~~	~~0.50~~	~~1~~	~~ug/l~~	~~J6~~	~~8260B~~	~~06/02/15~~	~~1~~
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/02/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	06/02/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/02/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/02/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	110.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	113.				% Rec.		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-07

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW51-NT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 15:28

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	123.				% Rec.	J1	8260B	06/02/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	U	0.0089	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Acenaphthene	83-32-9	U	0.011	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Acenaphthylene	208-96-8	U	0.0078	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(a)anthracene UJ MS-L	56-55-3	U	0.0092	0.028	0.0555	ug/l	J6	8270 C-	05/29/15	1.11
Benzo(a)pyrene UJ MS-L	50-32-8	U	0.018	0.028	0.0555	ug/l	J6	8270 C-	05/29/15	1.11
Benzo(b)fluoranthene UJ MS-L	205-99-2	U	0.0024	0.028	0.0555	ug/l	J6	8270 C-	05/29/15	1.11
Benzo(g,h,i)perylene R	~~191-24-2~~	~~U~~ U 0.0025	~~0.0025~~ 0.0081	~~0.028~~ 0.0555	~~0.0555~~	~~ug/l~~	~~J6~~	~~8270 C-~~	~~05/29/15~~	~~1.11~~
Benzo(k)fluoranthene UJ MS-L	207-08-9	U	0.028	0.039	0.0555	ug/l	J6	8270 C-	05/29/15	1.11
Chrysene UJ MS-L	218-01-9	U	0.016	0.028	0.0555	ug/l	J6	8270 C-	05/29/15	1.11
Dibenz(a,h)anthracene UJ MS-L	53-70-3	U	0.005	0.028	0.0555	ug/l	J6	8270 C-	05/29/15	1.11
Fluoranthene	206-44-0	U	0.018	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Fluorene	86-73-7	U	0.01	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Indeno(1,2,3-cd)pyrene UJ MS-L	193-39-5	U	0.0082	0.028	0.0555	ug/l	J6	8270 C-	05/29/15	1.11
Naphthalene FSQL-I	91-20-3	0.016	0.013	0.028	0.2775	ug/l	J	8270 C-	05/29/15	1.11
Phenanthrene	85-01-8	U	0.02	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Pyrene	129-00-0	U	0.017	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
1-Methylnaphthalene	90-12-0	U	0.02	0.028	0.2775	ug/l		8270 C-	05/29/15	1.11
2-Methylnaphthalene	91-57-6	U	0.017	0.028	0.2775	ug/l		8270 C-	05/29/15	1.11
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	47.8				% Rec.		8270 C-	05/29/15	1.11
2-Fluorobiphenyl	321-60-8	42.7				% Rec.		8270 C-	05/29/15	1.11
p-Terphenyl-d14	1718-51-0	44.9				% Rec.		8270 C-	05/29/15	1.11
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.33	5.0	10	ug/l		8270C	05/28/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.6	5.0	10	ug/l		8270C	05/28/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.44	5.0	10	ug/l		8270C	05/28/15	1
Benzyl Alcohol	100-51-6	U	0.39	5.0	10	ug/l		8270C	05/28/15	1
Carbazole	86-74-8	U	0.26	5.0	10	ug/l		8270C	05/28/15	1
Benzoic acid R	~~65-85-0~~	~~U~~ U 0.41	~~0.44~~ 5.0	~~5.0~~ 10	~~10~~	~~ug/l~~		~~8270C~~	~~05/28/15~~	~~1~~
Dibenzofuran	132-64-9	U	0.34	5.0	10	ug/l		8270C	05/28/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.34	5.0	10	ug/l		8270C	05/28/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.50	1	ug/l		8270C	05/28/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.3	5.0	10	ug/l		8270C	05/28/15	1
3,3-Dichlorobenzidine	91-94-1	U	2	5.0	10	ug/l		8270C	05/28/15	1
2,4-Dinitrotoluene	121-14-2	U	1.6	5.0	10	ug/l		8270C	05/28/15	1
2,6-Dinitrotoluene	606-20-2	U	0.28	5.0	10	ug/l		8270C	05/28/15	1
Hexachlorobenzene	118-74-1	U	0.34	0.50	1	ug/l		8270C	05/28/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.33~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/28/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.36	5.0	10	ug/l		8270C	05/28/15	1
Isophorone	78-59-1	U	0.27	5.0	10	ug/l		8270C	05/28/15	1
Nitrobenzene	98-95-3	U	0.37	5.0	10	ug/l		8270C	05/28/15	1
n-Nitrosodimethylamine	62-75-9	U	1.3	5.0	10	ug/l		8270C	05/28/15	1

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DNR: Do Not Report

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Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 23, 2015
Description : Hollman AFB

Sample ID : H-SS059-MW51-NT01

Collected By : Jon Mallonee
Collection Date : 05/21/15 15:28

ESC Sample # : L767115-07

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.3	5.0	10	ug/l		8270C	05/28/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.4	5.0	10	ug/l		8270C	05/28/15	1
Benzylbutyl phthalate	85-68-7	U	0.28	1.0	3	ug/l		8270C	05/28/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.71	1.0	3	ug/l		8270C	05/28/15	1
Di-n-butyl phthalate U MB-I	84-74-2	~~0.41~~ 1.0	~~0.27~~ 0.41	1.0	3	ug/l	J	8270C	05/28/15	1
Diethyl phthalate	84-66-2	U	0.28	1.0	3	ug/l		8270C	05/28/15	1
Dimethyl phthalate	131-11-3	U	0.28	1.0	3	ug/l		8270C	05/28/15	1
Di-n-octyl phthalate	117-84-0	U	0.28	1.0	3	ug/l		8270C	05/28/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.36~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/28/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol ~~U3/MS-L~~ R	~~59-50-7~~	~~U~~	~~0.26~~	~~5.0~~	~~10~~	~~ug/l~~	~~J6~~	~~8270C~~	~~05/28/15~~	~~1~~
2-Chlorophenol	95-57-8	U	0.28	5.0	10	ug/l		8270C	05/28/15	1
2,4-Dichlorophenol ~~U3 MS-L~~	120-83-2	U	0.28	5.0	10	ug/l		8270C	05/28/15	1
2,4-Dimethylphenol ~~U3 MS-L~~	105-67-9	U	0.62	5.0	10	ug/l	J6	8270C	05/28/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.6	5.0	10	ug/l		8270C	05/28/15	1
2,4-Dinitrophenol	51-28-5	U	3.2	5.0	10	ug/l		8270C	05/28/15	1
2-Methylphenol R	~~95-48-7~~	~~U~~	~~0.31~~	~~5.0~~	~~10~~	~~ug/l~~	~~J6~~	~~8270C~~	~~05/28/15~~	~~1~~
3&4-Methyl Phenol R	~~3&4-Methyl~~	~~U~~	~~0.27~~	~~5.0~~	~~10~~	~~ug/l~~	~~J6J3~~	~~8270C~~	~~05/28/15~~	~~1~~
2-Nitrophenol	88-75-5	U	0.32	5.0	10	ug/l		8270C	05/28/15	1
4-Nitrophenol	100-02-7	U	2	5.0	10	ug/l		8270C	05/28/15	1
4-Chloroaniline	106-47-8	U	0.38	5.0	10	ug/l		8270C	05/28/15	1
2-Nitroaniline	88-74-4	U	1.9	5.0	10	ug/l		8270C	05/28/15	1
3-Nitroaniline	99-09-2	U	0.31	5.0	10	ug/l		8270C	05/28/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.32	5.0	10	ug/l		8270C	05/28/15	1
4-Nitroaniline	100-01-6	U	0.35	5.0	10	ug/l		8270C	05/28/15	1
Pentachlorophenol	87-86-5	U	0.31	5.0	10	ug/l		8270C	05/28/15	1
Phenol	108-95-2	U	0.33	5.0	10	ug/l		8270C	05/28/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.24	5.0	10	ug/l		8270C	05/28/15	1
2,4,6-Trichlorophenol R	~~88-06-2~~	~~U~~	~~0.3~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/28/15~~	~~1~~
Surrogate Recovery										
2-Fluorophenol	367-12-4	2.05				% Rec.	J2	8270C	05/28/15	1
Phenol-d5	4165-62-2	1.51				% Rec.	J2	8270C	05/28/15	1
Nitrobenzene-d5	4165-60-0	60.1				% Rec.		8270C	05/28/15	1
2-Fluorobiphenyl	321-60-8	69.1				% Rec.		8270C	05/28/15	1
2,4,6-Tribromophenol	118-79-6	22.0				% Rec.		8270C	05/28/15	1
p-Terphenyl-d14	1718-51-0	62.8				% Rec.		8270C	05/28/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-08

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW50-ND01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 17:13

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Antimony,Dissolved FS SOL,ICS-H	7440-36-0	0.27	0.21	0.50	2	ug/l	J	6020	05/29/15	1
Arsenic,Dissolved	7440-38-2	7.1	0.25	0.50	2	ug/l		6020	05/31/15	1
Barium,Dissolved	7440-39-3	62.	0.36	1.0	5	ug/l		6020	05/29/15	1
Beryllium,Dissolved	7440-41-7	U	0.12	0.50	2	ug/l		6020	05/29/15	1
Cadmium,Dissolved FS SOL,ICS-H	7440-43-9	0.17	0.16	0.50	1	ug/l	J	6020	05/29/15	1
Chromium,Dissolved	7440-47-3	U	0.54	1.5	2	ug/l		6020	05/29/15	1
Copper,Dissolved F SOL-I	7440-50-8	0.90	0.52	1.5	5	ug/l	J	6020	05/29/15	1
Cobalt,Dissolved F SOL-I	7440-48-4	0.70	0.26	0.50	2	ug/l	J	6020	05/29/15	1
Lead,Dissolved FS SOL,ICS-H	7439-92-1	0.27	0.24	0.50	2	ug/l	J	6020	05/29/15	1
Manganese,Dissolved	7439-96-5	130	0.25	0.50	5	ug/l		6020	05/29/15	1
Nickel,Dissolved F SOL-I	7440-02-0	1.9	0.35	1.0	2	ug/l	J	6020	05/29/15	1
Selenium,Dissolved	7782-49-2	11.	0.38	1.0	2	ug/l		6020	05/29/15	1
Silver,Dissolved	7440-22-4	U	0.31	0.50	2	ug/l		6020	05/29/15	1
Thallium,Dissolved	7440-28-0	U	0.19	0.50	2	ug/l		6020	05/29/15	1
Vanadium,Dissolved	7440-62-2	17.	0.18	0.50	5	ug/l		6020	05/29/15	1
Zinc,Dissolved	7440-66-6	U	2.6	5.0	25	ug/l		6020	05/29/15	1
Mercury,Dissolved	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/26/15	1
Aluminum,Dissolved F SOL-I	7429-90-5	72.	35	50.	100	ug/l	J	6010B	05/31/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-09

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW50-NT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 17:13

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	21000000	2800	5000	10000	ug/l		2540 C-	05/30/15	1
Antimony FJ SOL, ICS-H	7440-36-0	0.36	0.21	0.50	2	ug/l	J	6020	06/01/15	1
Arsenic	7440-38-2	8.4	0.25	0.50	2	ug/l		6020	06/03/15	1
Barium	7440-39-3	65.	0.36	1.0	5	ug/l		6020	06/01/15	1
Beryllium	7440-41-7	U	0.12	0.50	2	ug/l		6020	06/01/15	1
Cadmium	7440-43-9	U	0.16	0.50	1	ug/l		6020	06/03/15	1
Chromium UJ MS-L	7440-47-3	U	0.54	1.5	2	ug/l		6020	06/03/15	1
Copper ~~J MB-I~~ UJ MB, MS-L	7440-50-8	~~0.65~~ 1.5	~~0.52~~ 0.65	1.5	5	ug/l	J	6020	06/01/15	1
Cobalt FSOL-I	7440-48-4	0.78	0.26	0.50	2	ug/l	J	6020	06/01/15	1
Lead	7439-92-1	U	0.24	0.50	2	ug/l		6020	06/01/15	1
Manganese	7439-96-5	130	0.25	0.50	5	ug/l		6020	06/01/15	1
Nickel J MS-L	7440-02-0	2.0	0.35	1.0	2	ug/l		6020	06/01/15	1
Selenium	7782-49-2	11.	0.38	1.0	2	ug/l		6020	06/01/15	1
Silver	7440-22-4	U	0.31	0.50	2	ug/l		6020	06/03/15	1
Thallium	7440-28-0	U	0.19	0.50	2	ug/l		6020	06/01/15	1
Vanadium	7440-62-2	19.	0.18	0.50	5	ug/l		6020	06/01/15	1
Zinc UJ MS-L	7440-66-6	U	2.6	5.0	25	ug/l		6020	06/01/15	1
Mercury UJ MS-L	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/27/15	1
Aluminum FJ SOL, MS-L	7429-90-5	250	180	250	500	ug/l	J	6010B	05/29/15	5
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l	J4	8260B	06/02/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	06/02/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l	J3	8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-09

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW50-NT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 17:13

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1
Methyl tert-butyl ether	1634-04-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Naphthalene DNR	~~91-20-3~~	~~U~~	~~1~~	~~2.5~~	~~5~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	~~1~~
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Styrene R	~~100-42-5~~	~~U~~	~~0.31~~	~~0.50~~	~~1~~	~~ug/l~~		~~8260B~~	~~06/02/15~~	~~1~~
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/02/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	06/02/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/02/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/02/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	107.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	114.				% Rec.		8260B	06/02/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-09

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-SS059-MW50-NT01

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 17:13

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
4-Bromofluorobenzene	460-00-4	109.				% Rec.		8260B	06/02/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene F SQL-I	120-12-7	0.0096	0.0089	0.028	0.0555	ug/l	J	8270 C-	05/29/15	1.11
Acenaphthene	83-32-9	U	0.011	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Acenaphthylene	208-96-8	U	0.0078	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(a)anthracene FJ SQL, MS-L	56-55-3	0.012	0.0092	0.028	0.0555	ug/l	J	8270 C-	05/29/15	1.11
Benzo(a)pyrene UJ MS-L	50-32-8	U	0.018	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Benzo(b)fluoranthene UJMB, MS-L	205-99-2	~~0.0063~~ 0.028	~~0.0024~~ 0.0063	0.028	0.0555	ug/l	J	8270 C-	05/29/15	1.11
Benzo(g,h,i)perylene FJ SQL, MS-L	191-24-2	0.0056	0.0025	0.028	0.0555	ug/l	J	8270 C-	05/29/15	1.11
Benzo(k)fluoranthene UJ MS-L	207-08-9	U	0.028	0.039	0.0555	ug/l		8270 C-	05/29/15	1.11
Chrysene	218-01-9	U	0.016	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Dibenz(a,h)anthracene FJ SQL, MS-L	53-70-3	0.0059	0.005	0.028	0.0555	ug/l	J	8270 C-	05/29/15	1.11
Fluoranthene	206-44-0	U	0.018	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Fluorene	86-73-7	U	0.01	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Indeno(1,2,3-cd)pyrene UJ MS-L	193-39-5	U	0.0082	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Naphthalene F SQL-I	91-20-3	0.018	0.013	0.028	0.2775	ug/l	J	8270 C-	05/29/15	1.11
Phenanthrene	85-01-8	U	0.02	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
Pyrene	129-00-0	U	0.017	0.028	0.0555	ug/l		8270 C-	05/29/15	1.11
1-Methylnaphthalene	90-12-0	U	0.02	0.028	0.2775	ug/l		8270 C-	05/29/15	1.11
2-Methylnaphthalene	91-57-6	U	0.017	0.028	0.2775	ug/l		8270 C-	05/29/15	1.11
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	56.0				% Rec.		8270 C-	05/29/15	1.11
2-Fluorobiphenyl	321-60-8	45.0				% Rec.		8270 C-	05/29/15	1.11
p-Terphenyl-d14	1718-51-0	44.6				% Rec.		8270 C-	05/29/15	1.11
Base/Neutral Extractables										
Bis(2-chlorethoxy)methane	111-91-1	U	0.33	5.0	10	ug/l		8270C	05/27/15	1
Bis(2-chloroethyl)ether	111-44-4	U	1.6	5.0	10	ug/l		8270C	05/27/15	1
Bis(2-chloroisopropyl)ether	39638-32-9	U	0.44	5.0	10	ug/l		8270C	05/27/15	1
Benzyl Alcohol	100-51-6	U	0.39	5.0	10	ug/l		8270C	05/27/15	1
Carbazole	86-74-8	U	0.26	5.0	10	ug/l		8270C	05/27/15	1
Benzoic acid	65-85-0	U	0.44	5.0	10	ug/l	J3	8270C	05/27/15	1
Dibenzofuran	132-64-9	U	0.34	5.0	10	ug/l		8270C	05/27/15	1
4-Bromophenyl-phenylether	101-55-3	U	0.34	5.0	10	ug/l		8270C	05/27/15	1
2-Chloronaphthalene	91-58-7	U	0.33	0.50	1	ug/l		8270C	05/27/15	1
4-Chlorophenyl-phenylether	7005-72-3	U	0.3	5.0	10	ug/l		8270C	05/27/15	1
3,3-Dichlorobenzidine	91-94-1	U	2	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dinitrotoluene	121-14-2	U	1.6	5.0	10	ug/l		8270C	05/27/15	1
2,6-Dinitrotoluene	606-20-2	U	0.28	5.0	10	ug/l		8270C	05/27/15	1
Hexachlorobenzene	118-74-1	U	0.34	0.50	1	ug/l		8270C	05/27/15	1
Hexachloro-1,3-butadiene DNR	~~87-68-3~~	~~U~~	~~0.33~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1~~
Hexachloroethane	67-72-1	U	0.36	5.0	10	ug/l		8270C	05/27/15	1
Isophorone	78-59-1	U	0.27	5.0	10	ug/l		8270C	05/27/15	1
Nitrobenzene	98-95-3	U	0.37	5.0	10	ug/l		8270C	05/27/15	1
n-Nitrosodimethylamine	62-75-9	U	1.3	5.0	10	ug/l		8270C	05/27/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 23, 2015
Description : Hollman AFB

Sample ID : H-SS059-MW50-NT01

Collected By : Jon Mallonee
Collection Date : 05/21/15 17:13

ESC Sample # : L767115-09

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
n-Nitrosodiphenylamine	86-30-6	U	0.3	5.0	10	ug/l		8270C	05/27/15	1
n-Nitrosodi-n-propylamine	621-64-7	U	0.4	5.0	10	ug/l		8270C	05/27/15	1
Benzylbutyl phthalate	85-68-7	U	0.28	1.0	3	ug/l		8270C	05/27/15	1
Bis(2-ethylhexyl)phthalate	117-81-7	U	0.71	1.0	3	ug/l		8270C	05/27/15	1
Di-n-butyl phthalate F SGL-I	84-74-2	0.41	0.27	1.0	3	ug/l	J	8270C	05/27/15	1
Diethyl phthalate	84-66-2	U	0.28	1.0	3	ug/l		8270C	05/27/15	1
Dimethyl phthalate	131-11-3	U	0.28	1.0	3	ug/l		8270C	05/27/15	1
Di-n-octyl phthalate	117-84-0	U	0.28	1.0	3	ug/l		8270C	05/27/15	1
1,2,4-Trichlorobenzene DNR	~~120-82-1~~	~~U~~	~~0.36~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1~~
Acid Extractables										
4-Chloro-3-methylphenol UJ MS-L	59-50-7	U	0.26	5.0	10	ug/l		8270C	05/27/15	1
2-Chlorophenol	95-57-8	U	0.28	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dichlorophenol UJ MS-L	120-83-2	U	0.28	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dimethylphenol UJ MS-L	105-67-9	U	0.62	5.0	10	ug/l		8270C	05/27/15	1
4,6-Dinitro-2-methylphenol	534-52-1	U	2.6	5.0	10	ug/l		8270C	05/27/15	1
2,4-Dinitrophenol	51-28-5	U	3.2	5.0	10	ug/l		8270C	05/27/15	1
2-Methylphenol R	~~95-48-7~~	~~U~~	~~0.31~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1~~
3&4-Methyl Phenol R	~~3&4-Methyl~~	~~U~~	~~0.27~~	~~5.0~~	~~10~~	~~ug/l~~		~~8270C~~	~~05/27/15~~	~~1~~
2-Nitrophenol	88-75-5	U	0.32	5.0	10	ug/l		8270C	05/27/15	1
4-Nitrophenol	100-02-7	U	2	5.0	10	ug/l	J3	8270C	05/27/15	1
4-Chloroaniline	106-47-8	U	0.38	5.0	10	ug/l		8270C	05/27/15	1
2-Nitroaniline	88-74-4	U	1.9	5.0	10	ug/l		8270C	05/27/15	1
3-Nitroaniline	99-09-2	U	0.31	5.0	10	ug/l		8270C	05/27/15	1
1,2-Diphenylhydrazine	103-33-3	U	0.32	5.0	10	ug/l		8270C	05/27/15	1
4-Nitroaniline	100-01-6	U	0.35	5.0	10	ug/l		8270C	05/27/15	1
Pentachlorophenol	87-86-5	U	0.31	5.0	10	ug/l		8270C	05/27/15	1
Phenol	108-95-2	U	0.33	5.0	10	ug/l		8270C	05/27/15	1
2,4,5-Trichlorophenol	95-95-4	U	0.24	5.0	10	ug/l		8270C	05/27/15	1
2,4,6-Trichlorophenol	88-06-2	U	0.3	5.0	10	ug/l		8270C	05/27/15	1
Surrogate Recovery										
2-Fluorophenol	367-12-4	49.0				% Rec.		8270C	05/27/15	1
Phenol-d5	4165-62-2	33.4				% Rec.		8270C	05/27/15	1
Nitrobenzene-d5	4165-60-0	62.2				% Rec.		8270C	05/27/15	1
2-Fluorobiphenyl	321-60-8	66.1				% Rec.		8270C	05/27/15	1
2,4,6-Tribromophenol	118-79-6	78.3				% Rec.		8270C	05/27/15	1
p-Terphenyl-d14	1718-51-0	65.8				% Rec.		8270C	05/27/15	1

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 23, 2015
Description : Hollman AFB

Sample ID : H-TU506-MW05-NT02

Collected By : Jon Mallonee
Collection Date : 05/21/15 10:30

ESC Sample # : L767115-10

Site ID :

Project # : 60425210 23446543.00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	3200000	2800	5000	10000	ug/l		2540 C-	05/30/15	1
Mercury	7439-97-6	U	0.049	0.080	0.2	ug/l		7470A	05/27/15	1
Aluminum F-SOL-I	7429-90-5	220	180	250	500	ug/l	J	6010B	05/29/15	5

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

ESC Sample # : L767115-11

Date Received : May 23, 2015
Description : Hollman AFB

Site ID :

Sample ID : H-TUQC-TRIPBLANK-TT02

Project # : 60425210 23446543.00

Collected By : Jon Mallonee
Collection Date : 05/21/15 08:00

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Volatile Organics										
Acetone	67-64-1	U	10	25.	50	ug/l		8260B	06/02/15	1
Benzene	71-43-2	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Bromobenzene	108-86-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Bromochloromethane	74-97-5	U	0.52	0.75	1	ug/l		8260B	06/02/15	1
Bromodichloromethane	75-27-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Bromoform	75-25-2	U	0.47	0.50	1	ug/l		8260B	06/02/15	1
Bromomethane	74-83-9	U	0.87	2.5	5	ug/l		8260B	06/02/15	1
n-Butylbenzene	104-51-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
sec-Butylbenzene	135-98-8	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
tert-Butylbenzene	98-06-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Carbon Disulfide	75-15-0	U	0.28	0.50	1	ug/l		8260B	06/02/15	1
Carbon tetrachloride	56-23-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Chlorobenzene	108-90-7	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Chlorodibromomethane	124-48-1	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
Chloroethane	75-00-3	U	0.45	2.5	5	ug/l	J4	8260B	06/02/15	1
Chloroform	67-66-3	U	0.32	2.5	5	ug/l		8260B	06/02/15	1
Chloromethane	74-87-3	U	0.28	0.50	2.5	ug/l	J3	8260B	06/02/15	1
2-Chlorotoluene	95-49-8	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
4-Chlorotoluene	106-43-4	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dibromo-3-Chloropropane	96-12-8	U	1.3	2.5	5	ug/l		8260B	06/02/15	1
1,2-Dibromoethane	106-93-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Dibromomethane	74-95-3	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichlorobenzene	95-50-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichlorobenzene	541-73-1	U	0.22	0.50	1	ug/l		8260B	06/02/15	1
1,4-Dichlorobenzene	106-46-7	U	0.27	0.50	1	ug/l		8260B	06/02/15	1
Dichlorodifluoromethane	75-71-8	U	0.55	2.5	5	ug/l		8260B	06/02/15	1
1,1-Dichloroethane	75-34-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloroethane	107-06-2	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloroethene	75-35-4	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
cis-1,2-Dichloroethene	156-59-2	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
trans-1,2-Dichloroethene	156-60-5	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
1,2-Dichloropropane	78-87-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1-Dichloropropene	563-58-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
1,3-Dichloropropane	142-28-9	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
cis-1,3-Dichloropropene	10061-01-5	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
trans-1,3-Dichloropropene	10061-02-6	U	0.42	0.50	1	ug/l		8260B	06/02/15	1
2,2-Dichloropropane	594-20-7	U	0.32	0.50	1	ug/l		8260B	06/02/15	1
Ethylbenzene	100-41-4	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
2-Hexanone	591-78-6	U	3.8	5.0	10	ug/l		8260B	06/02/15	1
Hexachloro-1,3-butadiene	87-68-3	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Isopropylbenzene	98-82-8	U	0.33	0.50	1	ug/l		8260B	06/02/15	1
p-Isopropyltoluene	99-87-6	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
2-Butanone (MEK)	78-93-3	U	3.9	5.0	10	ug/l		8260B	06/02/15	1
Methylene Chloride	75-09-2	U	1	2.5	5	ug/l		8260B	06/02/15	1
4-Methyl-2-pentanone (MIBK)	108-10-1	U	2.1	5.0	10	ug/l		8260B	06/02/15	1

U = Not Detected at the LOD
Note:
The reported analytical results relate only to the sample submitted.
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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 25, 2015

Date Received : May 23, 2015
Description : Hollman AFB

Sample ID : H-TUQC-TRIPBLANK-TT02

Collected By : Jon Mallonee
Collection Date : 05/21/15 08:00

ESC Sample # : L767115-11

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	0.37	0.50	1	ug/l		8260B	06/02/15	1
Naphthalene	91-20-3	U	1	2.5	5	ug/l		8260B	06/02/15	1
n-Propylbenzene	103-65-1	U	0.35	0.50	1	ug/l		8260B	06/02/15	1
Styrene	100-42-5	U	0.31	0.50	1	ug/l		8260B	06/02/15	1
1,1,1,2-Tetrachloroethane	630-20-6	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
1,1,2,2-Tetrachloroethane	79-34-5	U	0.13	0.75	1	ug/l		8260B	06/02/15	1
Tetrachloroethene	127-18-4	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
Toluene	108-88-3	U	0.78	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichlorobenzene	87-61-6	U	0.23	0.50	1	ug/l		8260B	06/02/15	1
1,2,4-Trichlorobenzene	120-82-1	U	0.36	0.50	1	ug/l		8260B	06/02/15	1
1,1,1-Trichloroethane	71-55-6	U	0.319	0.50	1	ug/l		8260B	06/02/15	1
1,1,2-Trichloroethane	79-00-5	U	0.38	0.50	1	ug/l		8260B	06/02/15	1
Trichloroethene	79-01-6	U	0.4	0.50	1	ug/l		8260B	06/02/15	1
Trichlorofluoromethane	75-69-4	U	1.2	2.5	5	ug/l		8260B	06/02/15	1
1,2,3-Trichloropropane	96-18-4	U	0.81	1.0	2.5	ug/l		8260B	06/02/15	1
1,2,4-Trimethylbenzene	95-63-6	U	0.37	0.50	1	ug/l		8260B	06/02/15	1
1,3,5-Trimethylbenzene	108-67-8	U	0.39	0.50	1	ug/l		8260B	06/02/15	1
o-Xylene	95-47-6	U	0.34	0.50	1	ug/l		8260B	06/02/15	1
m&p-Xylene	1330-20-7	U	0.72	1.0	2	ug/l		8260B	06/02/15	1
Vinyl chloride	75-01-4	U	0.26	0.50	1	ug/l		8260B	06/02/15	1
Surrogate Recovery										
Toluene-d8	2037-26-5	108.				% Rec.		8260B	06/02/15	1
Dibromofluoromethane	1868-53-7	109.				% Rec.		8260B	06/02/15	1
4-Bromofluorobenzene	460-00-4	111.				% Rec.		8260B	06/02/15	1

U = Not Detected at the LOD
Note:
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BW 9/15/15

Holloman AFB
Groundwater Monitoring
Data Review Summary

Data Package Number: L772219
Sampling Event Dates: June 18, 2015
Sample-specific Parameter Review/Laboratory Performance Parameters: Yes
Full Validation (e.g. result recalculation): No
Data Reviewer: Bryan Schmerber, URS Project Chemist
Date Completed: September 14, 2015
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							
				GRO	DRO/ORO	VOCs	PAHs	SVOCs	Dissolved Metals	Total Metals	TDS
L778844											
H-TU506-MW05-NT03	SA	L772219-01	Water	---	---	---	X	---	--	---	X

Sample Type: SA – Sample
Analyses:
DRO/ORO - Diesel and Oil Range Organics (8015D)
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	Yes	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.
Holding Times	Yes	All samples were analyzed within the method required holding time.
Laboratory Blanks • Method 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 None in this package	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. 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 (PAHs)	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	No	**Trip Blank** As volatile organic compounds (VOCs) and gasoline range organics (GROs) were not analyzed in this data package, a trip blank was not required. Further action was not necessary. **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.

Review Parameter	Criteria Met?	Comment
		Field Blank The frequency of field blanks met the QAPP requirement of one per twenty samples. A field blank was not submitted with this data package. 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 8270C Polynuclear Aromatic Hydrocarbons (PAHs)** The percent relative standard deviation (%RSD) values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **Total Dissolved Solids (TDS)** Initial calibrations (ICALs) are not required per the method for TDS.
Initial Calibration Verification/Continuing Calibration Verification	Yes	**Method 8270C Polynuclear Aromatic Hydrocarbons (PAHs)** The %RSD values for all target analytes in the calibration were less than 20%. Therefore, the initial calibration met method acceptance criteria. **TDS** Calibration verifications are not required for TDS.
Internal Standard (PAHs)	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. All of 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 or Equal to
°C – Degrees Celsius
% - Percent
%RSD – Percent Relative Standard Deviation
COC – Chain of Custody
GRO – Gasoline Range Organics
ICAL – Initial Calibration
ICV – Initial Calibration Verification
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
LOD – Limit of Detection
MS/MSD – Matrix Spike/ Matrix Spike Duplicate
PAHs – Polynuclear Aromatic Hydrocarbons
QAPP – Quality Assurance Project Plan
RPDs – Relative Percent Differences
SOP – Standard Operating Procedure
TDS – Total Dissolved Solids
VOCs – Volatile Organic Compounds

Table 1: Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
PAHs			
MB Batch WG797470 H-TU506-MW05-NT03	Benzo(b)fluoranthene	0.00221 µg/L	The associated results were reported at concentrations <5x the concentration of the blank contamination and were qualified as non-detect (U MB-I).
	Benzo(g,h,i)perylene	0.0103 µg/L	

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

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REPORT OF ANALYSIS

Sheri Fling
URS
8181 E. Tufts Avenue
Denver, CO 80237

June 26, 2015

ESC Sample # : L772219-01

Site ID :

Project # : 60425210 23446543.00

Date Received : June 19, 2015
Description : Holloman AFB

Sample ID : H-TU506-MW05-NT03

Collected By : Jon Mallonee
Collection Date : 06/18/15 08:10

Parameter	CAS#	Result	DL	LOD	LOQ	Units	Qual	Method	Date	Dil.
Dissolved Solids	DSOLIDS	3400000	2800	5000	10000	ug/l		2540 C-	06/25/15	1
Polynuclear Aromatic Hydrocarbons										
Anthracene	120-12-7	0.14	0.008	0.025	0.05	ug/l		8270 C-	06/23/15	1
Acenaphthene	83-32-9	U	0.01	0.025	0.05	ug/l		8270 C-	06/23/15	1
Acenaphthylene	208-96-8	U	0.007	0.025	0.05	ug/l		8270 C-	06/23/15	1
Benzo(a)anthracene FJ SQL, MS-L	56-55-3	0.015	0.0083	0.025	0.05	ug/l	J	8270 C-	06/23/15	1
Benzo(a)pyrene UJ MS-L	50-32-8	U	0.016	0.025	0.05	ug/l		8270 C-	06/23/15	1
Benzo(b)fluoranthene UJ 8-Z MS-L	205-99-2	~~0.0052~~ 0.025	~~0.0052~~ 0.0052	0.025	0.05	ug/l	J	8270 C-	06/23/15	1
Benzo(g,h,i)perylene UJ 8-Z MS-L	191-24-2	~~0.0053~~	~~0.0053~~	0.025	0.05	ug/l	J	8270 C-	06/23/15	1
Benzo(k)fluoranthene UJ MS-L	207-08-9	U	0.026	0.035	0.05	ug/l		8270 C-	06/23/15	1
Chrysene FJ SQL, MS-L	218-01-9	0.023	0.014	0.025	0.05	ug/l	J	8270 C-	06/23/15	1
Dibenz(a,h)anthracene FJ SQL, MS-L	53-70-3	0.0052	0.0045	0.025	0.05	ug/l	J	8270 C-	06/23/15	1
Fluoranthene	206-44-0	0.073	0.016	0.025	0.05	ug/l		8270 C-	06/23/15	1
Fluorene	86-73-7	U	0.009	0.025	0.05	ug/l		8270 C-	06/23/15	1
Indeno(1,2,3-cd)pyrene UJ MS-L	193-39-5	U	0.0074	0.025	0.05	ug/l		8270 C-	06/23/15	1
Naphthalene	91-20-3	U	0.012	0.025	0.25	ug/l		8270 C-	06/23/15	1
Phenanthrene	85-01-8	0.22	0.018	0.025	0.05	ug/l		8270 C-	06/23/15	1
Pyrene	129-00-0	0.49	0.016	0.025	0.05	ug/l		8270 C-	06/23/15	1
1-Methylnaphthalene	90-12-0	U	0.018	0.025	0.25	ug/l		8270 C-	06/23/15	1
2-Methylnaphthalene	91-57-6	U	0.016	0.025	0.25	ug/l		8270 C-	06/23/15	1
Surrogate Recovery										
Nitrobenzene-d5	4165-60-0	86.5				% Rec.		8270 C-	06/23/15	1
2-Fluorobiphenyl	321-60-8	77.9				% Rec.		8270 C-	06/23/15	1
p-Terphenyl-d14	1718-51-0	87.6				% Rec.		8270 C-	06/23/15	1

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9/14/15