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Operations Lead, Portfolio Operations Central

May 2, 2022

Mr. Brad Jones
Environmental Scientist Specialist – Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, New Mexico 87505

Re: Chevron Jal Landfarm (Permit NM2-0012), Lea County, New Mexico Background Sampling Report (Rev: 1)

Mr. Jones:

Chevron Environmental Management Company (CEMC) is continuing to manage ongoing activities at the Chevron Jal Landfarm (NM2-0012) located in Lea County, New Mexico. As part of the that ongoing work at the Jal Landfarm, and in accord with Part 36 requirements and the approved *Background Sampling and Analysis Plan*, we are submitting for your review and comment the following document (in electronic Adobe PDF format):

Background Sampling Report (Rev: 1) dated May 2022

This report was prepared by Arcadis U.S., Inc. (Arcadis) on behalf of CEMC to document the background sampling activities performed for CEMC during the calendar year 2021 at the above referenced project site. Initial review notes were provided by the EMNRD - Oil Conservation Division on February 4, 2022, and a follow up meeting was held on February 10, 2022 to review the review notes in detail. The original Background Sampling Report has been revised to address the Oil Conservation Division comments. One complete electronic copy is being provided via the online pay portal as previously requested by the NMOCD.

Should you have any questions or require additional information please contact me at (505) 690 5408 or you can reach me via email at amarti@chevron.com.

Respectfully,

Armando Martinez

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ARCADIS

Chevron Environmental Management Company

Background Sampling Report

Jal Landfarm NM-02-0012

Centralized Surface Waste Management Facility

Lea County, New Mexico

May 2022

Rev: 1

Background Sampling Report

Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

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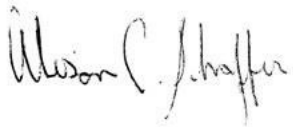
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Contents

Acronyms and Abbreviations iv
1 Introduction 1
1.1 Purpose and Objectives 1
1.2 Site Description and Background 1
2 Background Soil Sampling 3
2.1 Sample Collection and Handling Procedures 3
2.1.1 Deviations from the Background SAP 4
2.2 Data Evaluation 4
2.3 Results 5
2.3.1 Volatile Organic Compounds (VOCs) by Method 8260B 5
2.3.2 Pesticides by Method 8270D 5
2.3.3 Semivolatile Organic Compounds (SVOCs) by Method 8270D 5
2.3.4 Total Petroleum Hydrocarbons (TPH) by Methods 8015C and 8015B 6
2.3.5 Organochlorine Pesticides by Method 8081A 6
2.3.6 Polychlorinated Biphenyls (PCBs) by Method 8082A 6
2.3.7 Nitroaromatics and Nitramines by Method 8330B 6
2.3.8 Perchlorate by Method 6860 6
2.3.9 Fluorinated Alkyl Substances by Method DV-LC-0012 6
2.3.10 Metals and Mercury by Methods 6020 and 7471A 7
2.3.11 General Chemistry by Methods 9012B, SW846 9046D, 9065, 9056A, and 2540C 7
2.3.12 Radium-226 & Other Gamma Emitters by Method GA-01-R 7
3 Summary 8
4 References 9

Tables

Table 1. Background Constituent List
Table 2. Background Soil Analytical Results
Table 3. Background Soil Descriptive Statistics and Interval Estimator Statistics (i.e., UTLs) for Datasets Including and Excluding Outliers
Table 4. Outlier Evaluation

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Table 5. Summary of Elevated Nondetect Results

Table 6. Final Background Soil Descriptive Statistics and Interval Estimator Statistics (i.e., UTLs) for Datasets Excluding Outliers

Figures

Figure 1. Site Location Map

Figure 2. Background Sampling Locations

Appendices

Appendix A. Analytical Lab Reports

Appendix B. Data Validation Report

Appendix C. Background Soil Concentration Bar Charts

Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics

Acronyms and Abbreviations

Arcadis	Arcadis U.S., Inc.
Background SAP	Background Sampling and Analysis Plan
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
BTV	background threshold value
CEMC	Chevron Environmental Management Company
Chevron	Chevron North America Exploration & Production Company
DRO	diesel range organics
EPC	exposure point concentration
GPS	global positioning system
GRO	gasoline range organics
KM	Kaplan-Meier
MDL	method detection limit
mg/kg	milligram per kilogram
msl	mean sea level
NMAC	New Mexico Administrative Code
NMOCD	New Mexico Oil Conservation Division
ORO	oil range organics
OSE	Office of the State Engineer
PCBs	polychlorinated biphenyls
PQL	Practical Quantification Limit
Site	Centralized Surface Water Management Facility NM-02-0012 located in Lea County, New Mexico
SVOCs	semivolatile organic compounds
TPH	total petroleum hydrocarbons
USEPA	United States Environmental Protection Agency
95/95 UTL	upper tolerance limit (95% confidence around the 95th percentile)
VOCs	volatile organic compounds

1 Introduction

On behalf of Chevron Environmental Management Company (CEMC), Arcadis U.S., Inc. (Arcadis) has prepared this Background Sampling Report for the Jal Landfarm, a centralized surface waste management facility (NM-02-0012) located in Lea County, New Mexico (Site; **Figure 1**). This Background Sampling Report fulfills the reporting requirement of the Background Sampling and Analysis Plan (Background SAP; Arcadis 2020), which was approved by the New Mexico Oil Conservation Division (NMOCD) on August 14, 2020.

On August 2, 1999, the NMOCD issued Texaco Exploration & Production, Inc. (a legacy company of Chevron North America Exploration & Production Company [Chevron]) permit NM-02-0012, under Rule 711, to construct and operate a surface waste management facility (NMOCD 1999). The permit was subsequently amended on March 26, 2003 and April 1, 2004 (NMOCD 2003a, 2004). On February 14, 2007, Rule 711 was repealed and replaced by 19.15.36 New Mexico Administrative Code (NMAC; 02/14/2007, as amended through 06/30/2016), commonly referred to as Part 36. The Landfarm is permitted by the NMOCD under an existing waste management facility permit NM-02-0012 and Part 36.

1.1 Purpose and Objectives

The purpose of this document is to present background soil concentrations in accordance with provision 19.15.36.15(B) NMAC. As specified in 19.15.36.15(B) NMAC, prior to beginning operation of a new landfarm or to opening a new cell at an existing landfarm at which the operator has not already established background, the operator shall take, at a minimum, 12 composite background soil samples, with each consisting of 16 discrete samples from areas that previous operations have not impacted at least six inches below the original ground surface, to establish background soil concentrations for the entire surface waste management facility. The operator shall analyze the background soil samples for total petroleum hydrocarbons (TPH), as determined by United States Environmental Protection Agency (USEPA) method 418.1 or other USEPA method approved by the division; benzene, toluene, ethylbenzene, and xylenes (BTEX), as determined by USEPA SW-846 method 8021B or 8260B; chlorides; and other constituents listed in Subsections A and B of 20.6.2.3103 NMAC, using approved USEPA methods.

1.2 Site Description and Background

The Site is located approximately 4.5 miles northwest of Jal, New Mexico (west half of Section 17, Township 24 south, Range 36 east) north of Cooper cemetery Road (**Figure 1**). The Site is located within the Tertiary-age Ogallala formation, comprised of fluvial sand, silt, clay, and localized gravel. A caliche layer, approximately 9 to 21 feet thick, forms a hard, erosion resistant pedogenic calcrete approximately four feet below ground surface (bgs). The caliche has been observed as shallow as two to three feet bgs at the Site. The Ogallala formation is underlain by the Chinle formation, comprised of clay, silty clay, shale, and sandstone. The nearest fresh water well (CP-00970) is located in the Northeast ¼ of Southeast ¼, Section 8, Township 24 South, and Range 36 East. The well is located about 0.8 miles northeast of the site. According to the New Mexico Office of the State Engineer (OSE) the well was drilled to 198 feet bgs, with groundwater at approximately 180 ft bgs. The ground surface elevation of CP-00970 is approximately 3,396 feet above mean sea level (msl). The ground surface elevation of the landfarm ranges from approximately 3,364 feet above msl at the eastern boundary to approximately 3,390 feet above msl at the western boundary. Based off groundwater elevation at CP-00970, and ground surface elevation data from

the landfarm, depth to water beneath the landfarm is expected to range from 148 to 174 feet bgs. Regional groundwater flows from northwest to southeast (Stantec 2017).

The Site was originally approved for 56 cells to be constructed over an area of approximately 320 acres; however, only 26 cells were constructed (cells 1 through 26). Each cell is approximately 300 by 625 feet (approximately 4.3 acres). On July 29, 2003, the NMOCD approved discontinuation of maintenance for cells 1 through 16 because the treatment zone soil was treated to the applicable standards required under permit NM-02-0012 and no additional soil lifts were planned for these cells (NMOCD 2003b). On February 19, 2008, the NMOCD approved the discontinuation of maintenance for cells 22, 23, and 24 because the treatment zone closure performance standards were met (NMOCD 2008). Active maintenance has continued at cells 17, 18, 19, 20, 21, 25, and 26; no soil has been added to these cells since 2007.

2 Background Soil Sampling

The landfarm was permitted under NMOCD Rule 711 (replaced by Part 36), which required collection of a background sample near the central portion of the landfarm at a depth of two feet below ground surface. A background sample was collected on June 24, 1998, and subsequent background sampling was conducted on March 25 and June 25, 2009. However, to establish background conditions in accordance with Part 36 requirements, additional background sampling and analysis was performed at the Site on March 1 through 5, 2021 in accordance with the approved Background SAP (Arcadis 2020). Data collected from previous background sampling efforts were not used to establish representative background soil concentrations. The previously approved background concentrations from 1998 for TPH (Gasoline Range Organics fraction), major cations and anions, BTEX, and heavy metals will be superseded by the background soil concentrations calculated herein. This section describes the background sampling methods and results.

2.1 Sample Collection and Handling Procedures

To establish representative background soil concentrations, soil samples were collected from undeveloped cells numbered 29 through 40 (**Figure 2**). A total of 12 composite soil samples (one from each cell) was collected. Each composite soil sample consisted of 16 discrete samples collected from the locations depicted on **Figure 2**.

The discrete samples were collected by digging a test pit with a backhoe to the desired depth. The discrete samples were collected approximately 3 to 4 feet below the native ground surface (more than 6 inches below the original ground surface). An aliquot from each discrete sample was transferred from the backhoe bucket to a stainless-steel bowl that was kept in an ice chest until 16 aliquots were collected. The test pit and sample holes were backfilled with the excavated soil. The discrete sample locations were recorded with a Trimble handheld global positioning system (GPS) receiver.

The soil from the 16 aliquots was homogenized in the stainless-steel bowl and transferred to pre-cleaned laboratory-supplied sample containers. The laboratory containers were filled to near zero headspace, labeled, and chilled in an ice chest. This process was repeated until 12 composite samples were collected. The 12 composite samples were delivered under custody seal and chain-of-custody to Eurofins Xenco located in Corpus Christi, Texas. The samples were analyzed for the constituents shown in **Table 1**, as summarized below:

- Volatile Organic Compounds (VOCs) by Method 8260B (includes BTEX; 40 compounds);
- Pesticides by Method 8270D (1 compound);
- Semivolatile Organic Compounds (SVOCs) by Method 8270D (49 compounds);
- TPH - Gasoline Range Organics (GRO) by Method 8015C (1 compound);
- TPH - Diesel Range Organics (DRO) & Oil Range Organics (ORO) by Method 8015B (2 compounds);
- Organochlorine Pesticides by Method 8081A (16 compounds);
- Polychlorinated Biphenyls (PCBs) by Method 8082A (7 compounds);
- Nitroaromatics & Nitramines by Method 8330B (3 compounds);
- Perchlorate by Method 6860 (1 compound);
- Fluorinated Alkyl Substances by Method DV-LC-0012 (3 compounds);
- Metals by Method 6020 (15 compounds);

- Mercury by Method 7471A (1 compound);
- General Chemistry by Methods 9012B, SW846 9046D, and 9065 (3 compounds);
- General Chemistry – Soluble by Method 9056A (includes chloride; 6 compounds);
- General Chemistry – 7 Day Leach by Method 2540C (1 compound); and
- Radium-226 & Other Gamma Emitters by Method GA-01-R (3 compounds).

2.1.1 Deviations from the Background SAP

The following deviations from the Background SAP (Arcadis 2020) occurred:

- VOCs: The Background SAP lists dichloropropenes as a compound for background analysis; the four isomers 1,1-dichloropropene, cis-1,3-dichloropropene, trans-1,3-dichloropropene, and 1,3-dichloropropene, total were analyzed and reported.
- Organochlorine Pesticides: The Background SAP lists endosulfan as a compound for background analysis; endosulfan I and endosulfan II were analyzed and are reported. The Background SAP lists hexachlorocyclohexane as a compound for background analysis; the four isomers alpha-hexachlorocyclohexane, gamma-hexachlorocyclohexane, beta-hexachlorocyclohexane, and delta-hexachlorocyclohexane were analyzed and reported.
- Compounds bis(chloromethyl)ether and thiolane 1,1 dioxide were included in the SAP; however, Eurofins Xenco did not have the capability to analyze for these compounds. Arcadis contacted Pace Analytical, ALS Environmental, and Hall Environmental Analysis to determine available sampling methods and analysis capabilities for the required compounds. Due to the fast degradation rate of bis(chloromethyl)ether, laboratory analysis cannot be performed for this compound. Hall Environmental Analysis has the capability to analyze for thiolane 1,1 dioxide; Arcadis will work with this laboratory to analyze for thiolane 1,1 dioxide in the future as needed. Future thiolane 1,1 dioxide analytical results will be compared to the practical quantification limit (PQL) to determine if a potential release of this compound has occurred.

2.2 Data Evaluation

Eurofins reported values to the method detection limit (MDL). The MDLs used to assess each constituent for background concentrations may be proposed as practical quantification limits (PQLs) for future sample comparison purposes. **Appendix A** provides the completed sample chain-of-custody copies, lab reports, and the electronic data deliverables containing the sample analytical results. The data were reviewed and validated for completeness and accuracy, and any validation flags were amended to the data. **Table 2** and **Appendix B** present the final validated data and the data validation report, respectively. Samples results that were rejected (i.e., “R” flagged) during data validation due to significant quality control issues (e.g., holding time exceedances, laboratory control sample recoveries outside of control limits) are not presented in **Table 2** and were excluded from the data evaluation.

The data were evaluated statistically to calculate background concentrations for the constituents listed in **Table 1**. Statistical evaluation was performed in accordance with general statistical methods for data analysis presented in the *ProUCL Version 5.1 Technical Guide: Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations* (USEPA 2015). Statistical calculations were performed using USEPA statistical software ProUCL version 5.1.

The statistical evaluation consisted of calculating descriptive statistics (i.e., minimum, maximum, mean, median, and standard deviation) and interval estimator statistics (i.e., 95/95 upper tolerance limit [95/95 UTL]). The 95/95 UTLs are used as a Background Threshold Value (BTV) for point-by-point comparisons to site data (USEPA 2015).

Prior to calculating interval estimator statistics, datasets were assessed for normality and outliers. Potential outliers were determined by visual inspection of the compound concentration bar charts presented in **Appendix C**. Any outliers were removed, and subsequent datasets were reassessed for normality. Statistics are presented both including and excluding any outliers for comparison purposes in **Table 3**. The outlier evaluation is summarized in **Tables 4** and **5**. Final interval estimator statistics (i.e., 95/95 UTLs), excluding the outliers, are presented in **Table 6**. If a dataset contained one to three detections, the 95/95 UTL is equal to the maximum detection. If a dataset contained four or more detections, 95/95 UTLs were calculated using USEPA statistical software ProUCL version 5.1. Non-detects were included in calculations using Kaplan-Meier (KM) adjustments. If a dataset was entirely comprised of non-detects, the 95/95 UTL is equal to the maximum MDL (USEPA 2015). The ProUCL input data are presented in **Appendix D** and the ProUCL output sheets are presented in **Appendix E**.

2.3 Results

Descriptive statistics and interval estimator statistics (i.e., 95/95 UTLs) are summarized below and in **Tables 3** and **6**.

2.3.1 Volatile Organic Compounds (VOCs) by Method 8260B

None of the VOCs analyzed were detected in the background soil samples. Sample Cell 32-BG-S-3-4-210303 collected from Cell 32 was determined to be an outlier by visual evaluation of the compound concentration bar charts presented in **Appendix C**. Statistical outlier tests could not be conducted because the datasets are entirely comprised of non-detections. Visual inspection of the bar charts shows that sample Cell 32-BG-S-3-4-210303 has elevated MDLs for all VOC compounds when compared to the MDLs from the samples collected at the remaining eleven landfarm cells. The final VOC 95/95 UTLs are equal to the maximum non-detections (excluding the outlier; **Table 6**).

2.3.2 Pesticides by Method 8270D

The one pesticide analyzed by method 8270D (prometon) was not detected. No potential outliers were observed. The final 95/95 UTL is based on the maximum non-detections.

2.3.3 Semivolatile Organic Compounds (SVOCs) by Method 8270D

Only one of 49 SVOCs analyzed was detected (bis(2-ethylhexyl)phthalate in three samples). Two of the three detected results (Sample Cell 30-BG-S-3-4-210302 collected from Cell 30 and Sample Cell 29-BG-S-3-4-210302 collected from Cell 29) were determined to be outliers by visual evaluation of the compound concentration bar charts presented in **Appendix C**. The remaining 48 SVOCs were not detected and no potential outliers were observed. The final 95/95 UTL for bis(2-ethylhexyl)phthalate is equal to the maximum detection. The final 95/95 UTL for the remaining 48 SVOCs are based on the maximum non-detections.

2.3.4 Total Petroleum Hydrocarbons (TPH) by Methods 8015C and 8015B

GRO (C6-C10) was detected in one of twelve samples. The 95/95 UTL is equal to the detection because there was only one detected observation. No potential outliers were observed in the GRO (C6-C10) dataset.

DRO (C10-C28) was detected in two of twelve samples. The two detected results (Sample Cell 36-BG-S-3-4-210309 collected from Cell 36 and Sample Cell 40-BG-S-3-4-210309 collected from Cell 40) were determined to be outliers by visual evaluation of the compound concentration bar charts presented in **Appendix C**. Statistical outlier tests could not be conducted because the datasets contained insufficient detections. Based on an additional review by the data validation team, these results were determined to be biased high and the chromatograms for the samples did not match the diesel pattern in the standards. Therefore, the two detected results were removed as outliers. With the removal of these results, DRO (C10-C28) was not detected; therefore, the 95/95 UTL is based on the maximum non-detection.

ORO (C28-C36) was not detected; therefore the 95/95 UTL is based on the maximum non-detection. No potential outliers were observed in the ORO (C28-C36) dataset.

2.3.5 Organochlorine Pesticides by Method 8081A

None of the organochlorine pesticides analyzed were detected in the background soil samples. No potential outliers were observed. The final 95/95 UTLs are based on the maximum non-detections.

2.3.6 Polychlorinated Biphenyls (PCBs) by Method 8082A

None of the PCBs analyzed were detected in the background soil samples. No potential outliers were observed. The final 95/95 UTLs are based on the maximum non-detections.

2.3.7 Nitroaromatics and Nitramines by Method 8330B

None of the nitroaromatics and nitramines analyzed were detected in the background soil samples. No potential outliers were observed. The final 95/95 UTLs are based on the maximum non-detections.

2.3.8 Perchlorate by Method 6860

Perchlorate was detected in eight of twelve samples. No potential outliers were observed. The final 95/95 UTL is equal to the 95/95 KM Normal UTL and was calculated using ProUCL version 5.1 software.

2.3.9 Fluorinated Alkyl Substances by Method DV-LC-0012

None of the fluorinated alkyl substances analyzed were detected in the background soil samples. No potential outliers were observed. The final 95/95 UTLs are based on the maximum non-detections.

2.3.10 Metals and Mercury by Methods 6020 and 7471A

Arsenic, barium, beryllium, cadmium, chromium, copper, iron, lead, manganese, uranium, and zinc were detected in four or more samples; therefore, there was sufficient detections to calculate 95/95 UTLs using ProUCL version 5.1 software.

Selenium was detected in one of twelve samples. The 95/95 UTL is equal to the detection because there was only one detected observation.

Antimony, mercury, silver, and thallium were not detected. Their final 95/95 UTLs are based on the maximum non-detections.

One potential outlier was identified for barium (Sample Cell 35-BG-S-3-4-210308 from Cell 35); however, it was less than the 75th quartile plus three times the interquartile range and was, therefore, retained. No potential outliers were observed in the remaining metals or mercury datasets.

2.3.11 General Chemistry by Methods 9012B, SW846 9046D, 9065, 9056A, and 2540C

Phenols, total pH, chloride, fluoride, nitrate as nitrogen, nitrate nitrite as nitrogen, sulfate, and total dissolved solids were detected in four or more samples; therefore, there was sufficient detections to calculate 95/95 UTLs using ProUCL version 5.1 software.

Nitrite as N was detected in two samples; therefore, the final 95/95 UTL is equal to the maximum detection.

Cyanide was not detected; therefore, the final 95/95 UTL is equal to the maximum non-detection.

One outlier was identified by Dixon's Test in the Nitrate as N dataset (4.26 J mg/kg in sample Cell 32-BG-S-3-4-210303). This outlier was removed from the dataset prior to calculating the final 95/95 UTL.

One potential outlier was identified by visual inspection in the phenols dataset (5.59 mg/kg in sample Cell 34-BG-3-4-210305). This outlier was removed from the dataset prior to calculating the final 95/95 UTL.

One outlier was identified by Dixon's Test in the sulfate dataset (935 milligram per kilogram [mg/kg] in sample Cell 40-BG-S-3-4-210309). This outlier was removed from the dataset prior to calculating the final 95/95 UTL.

Two outliers were identified by Dixon's Test in the total dissolved solids dataset (370 milligrams per liter [mg/L] in sample Cell 37-BG-3-4-210304 and 524 mg/L in sample Cell 40-BG-3-4-210309). These outliers were removed from the dataset prior to calculating the final 95/95 UTL.

2.3.12 Radium-226 & Other Gamma Emitters by Method GA-01-R

Radium-226, radium-228, and combined radium-226/228 were detected in four or more samples; therefore, there was sufficient detections to calculate 95/95 UTLs using ProUCL version 5.1 software. No potential outliers were observed in the radium-226 and other gamma emitters datasets.

3 Summary

Site-specific background concentrations were established for 152 constituents and the final values are presented in **Table 4**. A spatial upper interval estimator background concentration to be used for point-by-point comparisons to site data is represented by the 95/95 UTL.

Sample Cell 32-BG-S-3-4-210303 was determined to be an outlier for VOCs and was removed from the VOC datasets prior to calculating final 95/95 UTLs. Sample Cells 30-BG-S-3-4-210302 collected from Cell 30 and Sample Cell 29-BG-S-3-4-210302 collected from Cell 29 were determined to be outliers in the bis(2-ethylhexyl) phthalate dataset. Samples Cell 36-BG-S-3-4-210309 collected from Cell 36 and Cell 40-BG-S-3-4-210309 from Cell 40 were determined to be outliers in the DRO (C10-C28) dataset. Sample Cell 32-BG-S-3-4-210303 collected from Cell 32 was determined to be an outlier in the nitrate as N dataset. Sample Cell 34-BG-3-4-210305 collected from Cell 34 was determined to be an outlier in the phenols dataset. Sample Cell 40-BG-S-3-4-210309 was determined to be an outlier in the sulfate dataset. Sample Cells 37-BG-3-4-210304 collected from Cell 37 and 40-BG-S-3-4-210309 collected from Cell 40 were determined to be outliers in the total dissolved solids dataset. These samples were removed from the respective dataset prior to calculating the final 95.95 UTL.

Of the 152 compounds analyzed, 125 compounds were not detected in any sample. For these datasets, the 95/95 UTLs are based on the maximum non-detections. Two compounds were detected in only one sample. For these datasets, the 95/95 UTL are equal to the detection because there was only one detected observation. Two compounds were detected in two or three samples. For these datasets, the 95/95 UTLs are based on the maximum detections. The remaining 23 compounds were detected in four or more samples. For these datasets, there were sufficient detections to calculate 95/95 UTLs in ProUCL version 5.1 software.

Compounds bis(chloromethyl)ether and thiolane 1,1 dioxide were included in the SAP, however the selected laboratory did not have the capability to analyze for these compounds. In addition to Eurofins Xenco, Arcadis contacted Pace Analytical, ALS Environmental, and Hall Environmental Analysis to determine available sampling methods and analysis capabilities for the two subject compounds. Due to the fast degradation rate of bis(chloromethyl)ether, laboratory analysis cannot be performed for this compound. Hall Environmental Analysis has the capability to analyze for thiolane 1,1 dioxide; Arcadis will work with this laboratory to analyze for thiolane 1,1 dioxide in the future as needed. Future thiolane 1,1 dioxide analytical results will be compared to the practical quantification limit (PQL) to determine if a potential release of this compound has occurred.

4 References

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Tables

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Table 1. Background Constituent List
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

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Volatile Organic Compounds (VOCs) by Method 8260B	Pesticides by Method 8270D	Semivolatile Organic Compounds (SVOCs) by Method 8270D	Total Petroleum Hydrocarbons (TPH) - Gasoline Range Organics (GRO) by Method 8015C	Total Petroleum Hydrocarbons (TPH) - Diesel Range Organics (DRO) & Oil Range Organics (ORO) by Method 8015B	Organochlorine Pesticides by Method 8081A	Polychlorinated Biphenyls (PCBs) by Method 8082A	Nitroaromatics & Nitramines by Method 8330B	Perchlorate by Method 6860	Fluorinated Alkyl Substances by Method DV-LC-0012
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethylene 1,1-Dichloropropene 1,2,4-Trichlorobenzene 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,3-Dichloropropene, Total 1,4-Dichlorobenzene 1,4-Dioxane Acrolein Acrylonitrile Benzene Bromodichloromethane Bromomethane Carbon Tetrachloride Chloroform Chloromethane cis-1,2-dichloroethene cis-1,3-Dichloropropene Dichlorodifluoromethane Ethylbenzene Methyl tert-butyl ether (MTBE) Methylene Chloride Monochlorobenzene Styrene Tetrachloroethylene (PCE) Toluene trans-1,2-Dichloroethene trans-1,3-Dichloropropene Tribromomethane Trichloroethylene (TCE) Trichlorofluoromethane Vinyl Chloride Xylenes, Total	Prometon	1,2,4,5-Tetrachlorobenzene 1,2-Diphenylhydrazine 1-Methylnaphthalene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dichlorophenol 2,4-Dinitro-o-cresol 2,4-Dinitrotoluene 2,6-Dinitrotoluene 2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Atrazine Benzidine Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Bis(2-chloroethyl)ether Bis(2-chloroisopropyl)ether Bis(2-ethylhexyl)phthalate Chrysene Dibenz(a,h)anthracene Dibutylphthalate Dichlorobenzidine, 3,3'- Diethyl Phthalate Dimethyl Phthalate Dinitrophenols Fluoranthene Fluorene Hexachlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloroethane Indeno(1,2,3-cd)pyrene Isophorone Naphthalene Nitrobenzene N-Nitrosodibutylamine N-nitrosodiethylamine N-Nitrosodimethylamine N-Nitrosodiphenylamine N-Nitrosopyrrolidine Pentachlorobenzene Pentachlorophenol Phenanthrene Pyrene	GRO (C6-C10)	DRO (C10-C28) ORO (C28-C36)	Aldrin Chlordane (technical) DDT Dieldrin Endosulfan I Endosulfan II Endosulfan sulfate Endrin Endrin aldehyde Heptachlor Heptachlor epoxide Hexachlorocyclohexane, alpha- Hexachlorocyclohexane, beta- Hexachlorocyclohexane, delta- Hexachlorocyclohexane, gamma- Toxaphene	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	2,4,6-Trinitrotoluene Hexahydro-1,3,5-trinitro-1,3,5-triazine Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Perchlorate	Perfluorooctanoic acid (PFOA) Perfluorooctanesulfonic acid (PFOS) Perfluorohexanesulfonic acid (PFHxS)

Metals by Method 6020	Mercury by Method 7471A	General Chemistry by Methods 9012B, SW846 9046D, and 9065	General Chemistry - Soluble by Method 9056A	General Chemistry - 7 Day Leach by Method 2540C	Radium-226 & Other Gamma Emitters by Method GA-01-R
Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Thallium Uranium Zinc	Mercury	Cyanide, Total pH Phenols, Total	Chloride Fluoride Nitrate as N Nitrate Nitrite as N Nitrite as N Sulfate	Total Dissolved Solids	Radium-226 Radium-228 Combined Radium 226/228

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Table 2. Background Soil Analytical Results
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

Compound	Units	Cell 29-BG-S-3-4-210302	Cell 30-BG-S-3-4-210302	Cell 31-BG-S-3-4-210303	Cell 32-BG-S-3-4-210303	Cell 33 -BG-S-3-4-210304	Cell 34 -BG-S-3-4-210305	Cell 35 -BG-S-3-4-210308	Cell 36-BG-S-3-4-210309	Cell 37 -BG-S-3-4-210304	Cell 38 -BG-S-3-4-210305	Cell 39 -BG-S-3-4-210308	Cell 40-BG-S-3-4-210309
		3/2/2021	3/2/2021	3/3/2021	3/3/2021	3/4/2021	3/5/2021	3/8/2021	3/9/2021	3/4/2021	3/5/2021	3/8/2021	3/9/2021
Volatile Organic Compounds (VOCs) by Method 8260B													
1,1,1-Trichloroethane	mg/kg	< 0.000491 U	< 0.000499 U	< 0.000491 U	< 0.000558 U	< 0.000497 U	< 0.000501 U	< 0.000500 U	< 0.000498 U	< 0.000499 U	< 0.000490 U	< 0.000499 U	< 0.000500 U
1,1,2,2-Tetrachloroethane	mg/kg	< 0.000373 U	< 0.000379 U	< 0.000373 U	< 0.000424 U	< 0.000378 U	< 0.000381 U	< 0.000380 U	< 0.000378 U	< 0.000379 U	< 0.000373 U	< 0.000379 U	< 0.000380 U
1,1,2-Trichloroethane	mg/kg	< 0.000491 U	< 0.000499 U	< 0.000491 U	< 0.000558 U	< 0.000497 U	< 0.000501 U	< 0.000500 U	< 0.000498 U	< 0.000499 U	< 0.000490 U	< 0.000499 U	< 0.000500 U
1,1-Dichloroethane	mg/kg	< 0.000580 U	< 0.000589 U	< 0.000580 U	< 0.000658 U	< 0.000586 U	< 0.000591 U	< 0.000590 U	< 0.000588 U	< 0.000589 U	< 0.000578 U	< 0.000589 U	< 0.000590 U
1,1-Dichloroethylene	mg/kg	< 0.000491 U	< 0.000499 U	< 0.000491 U	< 0.000558 U	< 0.000497 U	< 0.000501 U	< 0.000500 U	< 0.000498 U	< 0.000499 U	< 0.000490 U	< 0.000499 U	< 0.000500 U
1,1-Dichloropropene	mg/kg	< 0.000511 U	< 0.000519 U	< 0.000511 U	< 0.000580 U	< 0.000517 U	< 0.000521 U	< 0.000520 U	< 0.000518 U	< 0.000519 U	< 0.000510 U	< 0.000519 U	< 0.000520 U
1,2,4-Trichlorobenzene	mg/kg	< 0.000953 U	< 0.000968 U	< 0.000953 U	< 0.00108 U	< 0.000964 U	< 0.000972 U	< 0.000970 U	< 0.000966 U	< 0.000968 U	< 0.000951 U	< 0.000968 U	< 0.000970 U
1,2-Dibromoethane	mg/kg	< 0.000295 U	< 0.000299 U	< 0.000295 U	< 0.000335 U	< 0.000298 U	< 0.000301 U	< 0.000300 U	< 0.000299 U	< 0.000299 U	< 0.000294 U	< 0.000299 U	< 0.000300 U
1,2-Dichlorobenzene	mg/kg	< 0.000246 U	< 0.000250 U	< 0.000246 U	< 0.000279 U	< 0.000249 U	< 0.000251 U	< 0.000250 U	< 0.000249 U	< 0.000250 U	< 0.000245 U	< 0.000250 U	< 0.000250 U
1,2-Dichloroethane	mg/kg	< 0.000511 U	< 0.000519 U	< 0.000511 U	< 0.000580 U	< 0.000517 U	< 0.000521 U	< 0.000520 U	< 0.000518 U	< 0.000519 U	< 0.000510 U	< 0.000519 U	< 0.000520 U
1,2-Dichloropropane	mg/kg	< 0.000491 U	< 0.000499 U	< 0.000491 U	< 0.000558 U	< 0.000497 U	< 0.000501 U	< 0.000500 U	< 0.000498 U	< 0.000499 U	< 0.000490 U	< 0.000499 U	< 0.000500 U
1,3-Dichlorobenzene	mg/kg	< 0.000305 U	< 0.000309 U	< 0.000305 U	< 0.000346 U	< 0.000308 U	< 0.000311 U	< 0.000310 U	< 0.000309 U	< 0.000309 U	< 0.000304 U	< 0.000309 U	< 0.000310 U
1,3-Dichloropropene, Total	mg/kg	< 0.000511 U	< 0.000519 U	< 0.000511 U	< 0.000580 U	< 0.000517 U	< 0.000521 U	< 0.000520 U	< 0.000518 U	< 0.000519 U	< 0.000510 U	< 0.000519 U	< 0.000520 U
1,4-Dichlorobenzene	mg/kg	< 0.000314 U	< 0.000319 U	< 0.000314 U	< 0.000357 U	< 0.000318 U	< 0.000321 U	< 0.000320 U	< 0.000319 U	< 0.000319 U	< 0.000314 U	< 0.000319 U	< 0.000320 U
1,4-Dioxane	mg/kg	< 0.0187 U	< 0.0190 U	< 0.0187 U	< 0.0212 U	< 0.0189 U	< 0.0190 U	< 0.0190 U	< 0.0189 U	< 0.0190 U	< 0.0186 U	< 0.0190 U	< 0.0190 U
Acrolein	mg/kg	< 0.00845 U	< 0.00858 U	< 0.00845 U	< 0.00960 U	< 0.00855 U	< 0.00862 U	< 0.00860 U	< 0.00857 U	< 0.00858 U	< 0.00843 U	< 0.00858 U	< 0.00860 U
Acrylonitrile	mg/kg	< 0.00354 U	< 0.00359 U	< 0.00354 U	< 0.00402 U	< 0.00358 U	< 0.00361 U	< 0.00360 U	< 0.00359 U	< 0.00359 U	< 0.00353 U	< 0.00359 U	< 0.00360 U
Benzene	mg/kg	< 0.000619 U	< 0.000629 U	< 0.000619 U	< 0.000703 U	< 0.000626 U	< 0.000631 U	< 0.000630 U	< 0.000627 U	< 0.000629 U	< 0.000618 U	< 0.000629 U	< 0.000630 U
Bromodichloromethane	mg/kg	< 0.000196 U	< 0.000200 U	< 0.000196 U	< 0.000223 U	< 0.000199 U	< 0.000200 U	< 0.000200 U	< 0.000199 U	< 0.000200 U	< 0.000196 U	< 0.000200 U	< 0.000200 U
Bromomethane	mg/kg	< 0.00108 U	< 0.00110 U	< 0.00108 U	< 0.00123 U	< 0.00109 U	< 0.00110 U	< 0.00110 U	< 0.00110 U	< 0.00110 U	< 0.00108 U	< 0.00110 U	< 0.00110 U
Carbon Tetrachloride	mg/kg	< 0.000501 U	< 0.000509 U	< 0.000501 U	< 0.000569 U	< 0.000507 U	< 0.000511 U	< 0.000510 U	< 0.000508 U	< 0.000509 U	< 0.000500 U	< 0.000509 U	< 0.000510 U
Chloroform	mg/kg	< 0.000855 U	< 0.000868 U	< 0.000855 U	< 0.000971 U	< 0.000865 U	< 0.000872 U	< 0.000870 U	< 0.000867 U	< 0.000868 U	< 0.000853 U	< 0.000868 U	< 0.000870 U
Chloromethane	mg/kg	< 0.00118 U	< 0.00120 U	< 0.00118 U	< 0.00134 U	< 0.00119 U	< 0.00120 U	< 0.00120 U	< 0.00120 U	< 0.00120 U	< 0.00118 U	< 0.00120 U	< 0.00120 U
cis-1,2-dichloroethene	mg/kg	< 0.000560 U	< 0.000569 U	< 0.000560 U	< 0.000636 U	< 0.000567 U	< 0.000571 U	< 0.000570 U	< 0.000568 U	< 0.000569 U	< 0.000559 U	< 0.000569 U	< 0.000570 U
cis-1,3-Dichloropropene	mg/kg	< 0.000442 U	< 0.000449 U	< 0.000442 U	< 0.000502 U	< 0.000447 U	< 0.000451 U	< 0.000450 U	< 0.000448 U	< 0.000449 U	< 0.000441 U	< 0.000449 U	< 0.000450 U
Dichlorodifluoromethane	mg/kg	< 0.000717 U	< 0.000729 U	< 0.000717 U	< 0.000815 U	< 0.000726 U	< 0.000731 U	< 0.000730 U	< 0.000727 U	< 0.000729 U	< 0.000716 U	< 0.000729 U	< 0.000730 U
Ethylbenzene	mg/kg	< 0.000442 U	< 0.000449 U	< 0.000442 U	< 0.000502 U	< 0.000447 U	< 0.000451 U	< 0.000450 U	< 0.000448 U	< 0.000449 U	< 0.000441 U	< 0.000449 U	< 0.000450 U
Methyl tert-butyl ether (MTBE)	mg/kg	< 0.000599 U	< 0.000609 U	< 0.000599 U	< 0.000681 U	< 0.000606 U	< 0.000611 U	< 0.000610 U	< 0.000608 U	< 0.000609 U	< 0.000598 U	< 0.000609 U	< 0.000610 U
Methylene Chloride	mg/kg	< 0.00491 U	< 0.00499 U	< 0.00491 U	< 0.00558 U	< 0.00497 U	< 0.00501 U	< 0.00500 U	< 0.00498 U	< 0.00499 U	< 0.00490 U	< 0.00499 U	< 0.00500 U
Monochlorobenzene	mg/kg	< 0.000295 U	< 0.000299 U	< 0.000295 U	< 0.000335 U	< 0.000298 U	< 0.000301 U	< 0.000300 U	< 0.000299 U	< 0.000299 U	< 0.000294 U	< 0.000299 U	< 0.000300 U
Styrene	mg/kg	< 0.000295 U	< 0.000299 U	< 0.000295 U	< 0.000335 U	< 0.000298 U	< 0.000301 U	< 0.000300 U	< 0.000299 U	< 0.000299 U	< 0.000294 U	< 0.000299 U	< 0.000300 U
Tetrachloroethylene (PCE)	mg/kg	< 0.000727 U	< 0.000739 U	< 0.000727 U	< 0.000826 U	< 0.000736 U	< 0.000741 U	< 0.000740 U	< 0.000737 U	< 0.000739 U	< 0.000725 U	< 0.000739 U	< 0.000740 U
Toluene	mg/kg	< 0.000884 U	< 0.000898 U	< 0.000884 U	< 0.00100 U	< 0.000895 U	< 0.000902 U	< 0.000900 U	< 0.000896 U	< 0.000898 U	< 0.000882 U	< 0.000898 U	< 0.000900 U
trans-1,2-Dichloroethene	mg/kg	< 0.000491 U	< 0.000499 U	< 0.000491 U	< 0.000558 U	< 0.000497 U	< 0.000501 U	< 0.000500 U	< 0.000498 U	< 0.000499 U	< 0.000490 U	< 0.000499 U	< 0.000500 U
trans-1,3-Dichloropropene	mg/kg	< 0.000511 U	< 0.000519 U	< 0.000511 U	< 0.000580 U	< 0.000517 U	< 0.000521 U	< 0.000520 U	< 0.000518 U	< 0.000519 U	< 0.000510 U	< 0.000519 U	< 0.000520 U
Tribromomethane	mg/kg	< 0.000501 U	< 0.000509 U	< 0.000501 U	< 0.000569 U	< 0.000507 U	< 0.000511 U	< 0.000510 U	< 0.000508 U	< 0.000509 U	< 0.000500 U	< 0.000509 U	< 0.000510 U
Trichloroethylene (TCE)	mg/kg	< 0.000275 U	< 0.000279 U	< 0.000275 U	< 0.000313 U	< 0.000278 U	< 0.000281 U	< 0.000280 U	< 0.000279 U	< 0.000279 U	< 0.000275 U	< 0.000279 U	< 0.000280 U
Trichlorofluoromethane	mg/kg	< 0.000491 U	< 0.000499 U	< 0.000491 U	< 0.000558 U	< 0.000497 U	< 0.000501 U	< 0.000500 U	< 0.000498 U	< 0.000499 U	< 0.000490 U	< 0.000499 U	< 0.000500 U
Vinyl Chloride	mg/kg	< 0.000589 U	< 0.000599 U	< 0.000589 U	< 0.000670 U	< 0.000596 U	< 0.000601 U	< 0.000600 U	< 0.000598 U	< 0.000599 U	< 0.000588 U	< 0.000599 U	< 0.000600 U
Xylenes, Total	mg/kg	< 0.000491 U	< 0.000499 U	< 0.000491 U	< 0.000558 U	< 0.000497 U	< 0.000501 U	< 0.000500 U	< 0.000498 U	< 0.000499 U	< 0.000490 U	< 0.000499 U	< 0.000500 U
Pesticides by Method 8270D													
Prometon	mg/kg	< 0.0118 U	< 0.0119 U	< 0.0120 U	< 0.0119 U	< 0.0119 U	< 0.0119 U	< 0.0119 U	< 0.0117 UJ	< 0.0120 U	< 0.0118 U	< 0.0118 U	R
Semivolatile Organic Compounds (SVOCs) by Method 8270D													
1,2,4,5-Tetrachlorobenzene	mg/kg	< 0.0476 UJ	< 0.0467 UJ	< 0.0476 UJ	< 0.0448 UJ	< 0.0488 UJ	< 0.0488 U	< 0.0462 UJ	< 0.0487 UJ	< 0.0490 UJ	< 0.0490 UJ	< 0.0448 UJ	R
1,2-Diphenylhydrazine	mg/kg	< 0.0214 U	< 0.0210 U	< 0.0214 U	< 0.0201 U	< 0.0219 UJ	< 0.0219 U	< 0.0208 UJ	< 0.0219 UJ	< 0.0220 UJ	< 0.0220 U	< 0.0201 U	R
1-Methylnaphthalene	mg/kg	< 0.0109 U	< 0.0107 U	< 0.0109 U	< 0.0102 U	< 0.0112 UJ	< 0.0112 U	< 0.0106 UJ	< 0.0111 UJ	< 0.0112 UJ	< 0.0112 UJ	< 0.0102 UJ	R
2,4,5-Trichlorophenol	mg/kg	< 0.00971 U	< 0.00952 U	< 0.00971 U	< 0.00915 U	< 0.00997 UJ	< 0.00997 U	< 0.00943 UJ	< 0.00993 UJ	< 0.0100 UJ	< 0.0100 UJ	< 0.00915 U	R
2,4,6-Trichlorophenol	mg/kg	< 0.00971 U	< 0.00952 U	< 0.00971 U	< 0.00915 U	< 0.00997 UJ	< 0.00997 U	< 0.00943 UJ	< 0.00993 UJ	< 0.0100 UJ	< 0.0100 UJ	< 0.00915 U	R
2,4-Dichlorophenol	mg/kg	< 0.00971 UJ	< 0.00952 UJ	< 0.00971 UJ	< 0.00915 UJ	< 0.00997 UJ	< 0.00997 UJ	< 0.00943 UJ	< 0.00993 UJ	< 0.0100 UJ	< 0.0100 UJ	< 0.00915 UJ	R
2,4-Dinitro-o-cresol	mg/kg	< 0.320 U	< 0.314 U	< 0.320 U	< 0.302 U	< 0.329 UJ	< 0.329 U	< 0.311 UJ	< 0.328 UJ	< 0.330 UJ	< 0.330 UJ	< 0.302 U	R
2,4-Dinitrotoluene	mg/kg	< 0.0641 U	< 0.0629 U	< 0.0641 U	< 0.0604 U	< 0.0658 UJ	< 0.0658 U	< 0.0623 UJ	< 0.0656 UJ	< 0.0660 UJ	< 0.0660 U	< 0.0604 U	R
2,6-Dinitrotoluene	mg/kg	< 0.0272 U	< 0.0267 U	< 0.0272 U	< 0.0256 U	< 0.0279 UJ	< 0.0279 UJ	< 0.0264 UJ	< 0.0278 UJ	< 0.0280 UJ	< 0.0280 UJ	< 0.0256 UJ	R
2-Methylnaphthalene	mg/kg	< 0.0184 UJ	< 0.0181 UJ	< 0.0184 UJ	< 0.0174 UJ	< 0.0189 UJ	< 0.0189 UJ	< 0.0179 UJ	< 0.0189 UJ	< 0.0190 UJ	< 0.0190 UJ	< 0.0174 UJ	R
Acenaphthene	mg/kg	< 0.0100 U	< 0.00981 U	< 0.0100 U	< 0.00942 U	< 0.0103 UJ	< 0.0103 U	< 0.00972 UJ	< 0.0102 UJ	< 0.0103 UJ	< 0.0103 UJ	< 0.00942 UJ	R
Acenaphthylene	mg/kg	< 0.0797 U	< 0.0782 U	< 0.0797 U	< 0.0751 U	< 0.0818 UJ	< 0.0818 UJ	< 0.0775 UJ	< 0.0816 UJ	< 0.0821 UJ	< 0.0821 UJ	< 0.0751 UJ	R

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Compound	Units	Cell 29-BG-S-3-4-210302	Cell 30-BG-S-3-4-210302	Cell 31-BG-S-3-4-210303	Cell 32-BG-S-3-4-210303	Cell 33 -BG-S-3-4-210304	Cell 34 -BG-S-3-4-210305	Cell 35 -BG-S-3-4-210308	Cell 36-BG-S-3-4-210309	Cell 37 -BG-S-3-4-210304	Cell 38 -BG-S-3-4-210305	Cell 39 -BG-S-3-4-210308	Cell 40-BG-S-3-4-210309
		3/2/2021	3/2/2021	3/3/2021	3/3/2021	3/4/2021	3/5/2021	3/8/2021	3/9/2021	3/4/2021	3/5/2021	3/8/2021	3/9/2021
Anthracene	mg/kg	< 0.0165 U	< 0.0162 U	< 0.0165 U	< 0.0155 U	< 0.0169 UJ	< 0.0169 U	< 0.0160 UJ	< 0.0169 UJ	< 0.0170 UJ	< 0.0170 U	< 0.0155 U	R
Atrazine	mg/kg	< 0.0359 U	< 0.0352 U	< 0.0359 U	< 0.0338 U	< 0.0369 UJ	< 0.0369 U	< 0.0349 U	< 0.0368 UJ	< 0.0370 UJ	< 0.0370 U	< 0.0338 U	R
Benzidine	mg/kg	< 0.961 U	< 0.943 U	< 0.961 U	< 0.905 U	< 0.987 UJ	< 0.987 U	< 0.934 U	< 0.983 UJ	< 0.990 UJ	< 0.990 U	< 0.905 U	R
Benzo(a)anthracene	mg/kg	< 0.0194 U	< 0.0190 U	< 0.0194 U	< 0.0183 U	< 0.0199 UJ	< 0.0199 U	< 0.0189 UJ	< 0.0199 UJ	< 0.0200 UJ	< 0.0200 U	< 0.0183 U	R
Benzo(a)pyrene	mg/kg	< 0.0194 U	< 0.0190 U	< 0.0194 U	< 0.0183 U	< 0.0199 UJ	< 0.0199 U	< 0.0189 UJ	< 0.0199 UJ	< 0.0200 UJ	< 0.0200 U	< 0.0183 U	R
Benzo(b)fluoranthene	mg/kg	< 0.0254 U	< 0.0250 U	< 0.0254 U	< 0.0240 U	< 0.0261 UJ	< 0.0261 U	< 0.0247 U	< 0.0260 UJ	< 0.0262 UJ	< 0.0262 U	< 0.0240 U	R
Benzo(g,h,i)perylene	mg/kg	< 0.0155 U	< 0.0152 U	< 0.0155 U	< 0.0146 U	< 0.0159 UJ	< 0.0159 U	< 0.0151 U	< 0.0159 UJ	< 0.0160 UJ	< 0.0160 U	< 0.0146 U	R
Benzo(k)fluoranthene	mg/kg	< 0.0388 U	< 0.0381 U	< 0.0388 U	< 0.0366 U	< 0.0399 UJ	< 0.0399 U	< 0.0377 U	< 0.0397 UJ	< 0.0400 UJ	< 0.0400 U	< 0.0366 U	R
Bis(2-chloroethyl)ether	mg/kg	< 0.0161 UJ	< 0.0158 UJ	< 0.0161 UJ	< 0.0152 UJ	< 0.0165 UJ	< 0.0165 UJ	< 0.0157 UJ	< 0.0165 UJ	< 0.0166 UJ	< 0.0166 UJ	< 0.0152 UJ	R
Bis(2-chloroisopropyl)ether	mg/kg	< 0.0223 U	< 0.0219 U	< 0.0223 U	< 0.0210 U	< 0.0229 UJ	< 0.0229 U	< 0.0217 U	< 0.0228 UJ	< 0.023 UJ	< 0.023 UJ	< 0.0210 U	R
Bis(2-ethylhexyl)phthalate	mg/kg	**0.203 J**	**0.169 J**	< 0.0447 U	< 0.0421 U	< 0.0458 UJ	< 0.0458 U	**0.0537 J**	< 0.0457 UJ	< 0.0460 UJ	< 0.0460 U	< 0.0421 U	R
Chrysene	mg/kg	< 0.0262 U	< 0.0257 U	< 0.0262 U	< 0.0247 U	< 0.0269 UJ	< 0.0269 U	< 0.0255 UJ	< 0.0268 UJ	< 0.0270 UJ	< 0.0270 U	< 0.0247 U	R
Dibenz(a,h)anthracene	mg/kg	< 0.0184 U	< 0.0181 U	< 0.0184 U	< 0.0174 U	< 0.0189 UJ	< 0.0189 U	< 0.0179 U	< 0.0189 UJ	< 0.0190 UJ	< 0.0190 U	< 0.0174 U	R
Dibutylphthalate	mg/kg	< 0.0282 U	< 0.0276 U	< 0.0282 U	< 0.0265 U	< 0.0289 UJ	< 0.0289 U	< 0.0274 U	< 0.0288 UJ	< 0.0290 UJ	< 0.0290 U	< 0.0265 U	R
Dichlorobenzidine, 3,3'-	mg/kg	< 0.0874 U	< 0.0857 U	< 0.0874 U	< 0.0823 U	< 0.0897 UJ	< 0.0897 U	< 0.0849 U	< 0.0894 UJ	< 0.0900 UJ	< 0.0900 U	< 0.0823 U	R
Diethyl Phthalate	mg/kg	< 0.0252 U	< 0.0248 U	< 0.0252 U	< 0.0238 U	< 0.0259 UJ	< 0.0259 UJ	< 0.0245 UJ	< 0.0258 UJ	< 0.0260 UJ	< 0.0260 UJ	< 0.0238 U	R
Dimethyl Phthalate	mg/kg	< 0.0223 U	< 0.0219 U	< 0.0223 U	< 0.0210 U	< 0.0229 UJ	< 0.0229 U	< 0.0217 UJ	< 0.0228 UJ	< 0.023 UJ	< 0.023 UJ	< 0.0210 UJ	R
Dinitrophenols	mg/kg	< 0.323 U	< 0.317 U	< 0.323 U	< 0.305 U	< 0.332 UJ	< 0.332 U	< 0.314 UJ	< 0.331 UJ	< 0.333 UJ	< 0.333 UJ	< 0.305 U	R
Fluoranthene	mg/kg	< 0.0350 U	< 0.0343 U	< 0.0350 U	< 0.0329 U	< 0.0359 UJ	< 0.0359 U	< 0.0340 U	< 0.0358 UJ	< 0.0360 UJ	< 0.0360 U	< 0.0329 U	R
Fluorene	mg/kg	< 0.0175 U	< 0.0171 U	< 0.0175 U	< 0.0165 U	< 0.0179 UJ	< 0.0179 UJ	< 0.0170 UJ	< 0.0179 UJ	< 0.018 UJ	< 0.018 UJ	< 0.0165 U	R
Hexachlorobenzene	mg/kg	< 0.0282 U	< 0.0276 U	< 0.0282 U	< 0.0265 U	< 0.0289 UJ	< 0.0289 U	< 0.0274 UJ	< 0.0288 UJ	< 0.0290 UJ	< 0.0290 U	< 0.0265 U	R
Hexachlorobutadiene	mg/kg	< 0.00971 UJ	< 0.00952 UJ	< 0.00971 UJ	< 0.00915 UJ	< 0.00997 UJ	< 0.00997 U	< 0.00943 UJ	< 0.00993 UJ	< 0.0100 UJ	< 0.0100 UJ	< 0.00915 UJ	R
Hexachlorocyclopentadiene	mg/kg	< 0.108 U	< 0.106 U	< 0.108 U	< 0.102 U	< 0.111 UJ	< 0.111 U	< 0.105 U	< 0.110 UJ	< 0.111 UJ	< 0.111 U	< 0.102 U	R
Hexachloroethane	mg/kg	< 0.0207 UJ	< 0.0203 UJ	< 0.0207 UJ	< 0.0195 UJ	< 0.0212 UJ	< 0.0212 UJ	< 0.0201 UJ	< 0.0212 UJ	< 0.0213 UJ	< 0.0213 UJ	< 0.0195 UJ	R
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.0214 U	< 0.0210 U	< 0.0214 U	< 0.0201 U	< 0.0219 UJ	< 0.0219 U	< 0.0208 U	< 0.0219 UJ	< 0.0220 UJ	< 0.0220 U	< 0.0201 U	R
Isophorone	mg/kg	< 0.0165 UJ	< 0.0162 UJ	< 0.0165 UJ	< 0.0155 UJ	< 0.0169 UJ	< 0.0169 U	< 0.0160 UJ	< 0.0169 UJ	< 0.0170 UJ	< 0.0170 UJ	< 0.0155 UJ	R
Naphthalene	mg/kg	< 0.0301 UJ	< 0.0295 UJ	< 0.0301 UJ	< 0.0284 UJ	< 0.0309 UJ	< 0.0309 UJ	< 0.0292 UJ	< 0.0308 UJ	< 0.0310 UJ	< 0.0310 UJ	< 0.0284 UJ	R
Nitrobenzene	mg/kg	< 0.0214 U	< 0.0210 U	< 0.0214 U	< 0.0201 U	< 0.0219 UJ	< 0.0219 U	< 0.0208 UJ	< 0.0219 UJ	< 0.0220 UJ	< 0.0220 UJ	< 0.0201 UJ	R
N-Nitrosodibutylamine	mg/kg	< 0.0939 U	< 0.0921 U	< 0.0939 U	< 0.0884 U	< 0.0964 UJ	< 0.0964 U	< 0.0912 U	< 0.0961 UJ	< 0.0967 UJ	< 0.0967 U	< 0.0884 U	R
N-Nitrosodiethylamine	mg/kg	< 0.0631 U	< 0.0619 U	< 0.0631 U	< 0.0595 U	< 0.0648 UJ	< 0.0648 U	< 0.0613 U	< 0.0646 UJ	< 0.0650 UJ	< 0.0650 U	< 0.0595 U	R
N-Nitrosodimethylamine	mg/kg	< 0.0359 UJ	< 0.0352 UJ	< 0.0359 UJ	< 0.0338 UJ	< 0.0369 UJ	< 0.0369 U	< 0.0349 UJ	< 0.0368 UJ	< 0.0370 UJ	< 0.0370 U	< 0.0338 UJ	R
N-Nitrosodiphenylamine	mg/kg	< 0.0204 U	< 0.0200 U	< 0.0204 U	< 0.0192 U	< 0.0209 UJ	< 0.0209 U	< 0.0198 UJ	< 0.0209 UJ	< 0.0210 UJ	< 0.0210 U	< 0.0192 U	R
N-Nitrosopyrrolidine	mg/kg	< 0.0621 U	< 0.0610 U	< 0.0621 U	< 0.0585 U	< 0.0638 UJ	< 0.0638 U	< 0.0604 U	< 0.0636 UJ	< 0.0640 UJ	< 0.0640 U	< 0.0585 U	R
Pentachlorobenzene	mg/kg	< 0.0631 U	< 0.0619 U	< 0.0631 U	< 0.0595 U	< 0.0648 UJ	< 0.0648 U	< 0.0613 U	< 0.0646 UJ	< 0.0650 UJ	< 0.0650 U	< 0.0595 U	R
Pentachlorophenol	mg/kg	< 0.320 U	< 0.314 U	< 0.320 U	< 0.302 U	< 0.329 UJ	< 0.329 U	< 0.311 U	< 0.328 UJ	< 0.330 UJ	< 0.330 U	< 0.302 U	R
Phenanthrene	mg/kg	< 0.0165 U	< 0.0162 U	< 0.0165 U	< 0.0155 U	< 0.0169 UJ	< 0.0169 U	< 0.0160 UJ	< 0.0169 UJ	< 0.0170 UJ	< 0.0170 U	< 0.0155 U	R
Pyrene	mg/kg	< 0.0117 U	< 0.0115 U	< 0.0117 U	< 0.0111 U	< 0.0121 UJ	< 0.0121 U	< 0.0114 UJ	< 0.0120 UJ	< 0.0121 UJ	< 0.0121 U	< 0.0111 U	R
Total Petroleum Hydrocarbons (TPH) - Gasoline Range Organics (GRO) by Method 8015C													
GRO (C6-C10)	mg/kg	< 0.0637 U	< 0.0639 U	< 0.0629 U	< 0.0647 U	< 0.0634 U	< 0.0650 U	< 0.0652 U	< 0.0648 U	< 0.0648 U	< 0.0647 U	< 0.0632 U	**0.0822 J**
Total Petroleum Hydrocarbons (TPH) - Diesel Range Organics (DRO) and Oil Range Organics (ORO) by Method 8015B													
DRO (C10-C28)	mg/kg	< 35.2 U	< 34.7 U	< 33.9 U	< 35.4 U	< 33.9 U	< 34.5 U	< 36.2 U	**56.9**	< 33.5 U	< 33.2 U	< 34.7 U	**72.3**
ORO (C28-C36)	mg/kg	< 35.2 U	< 34.7 U	< 33.9 U	< 35.4 U	< 33.9 U	< 34.5 U	< 36.2 U	< 35.3 U	< 33.5 U	< 33.2 U	< 34.7 U	< 33.5 U
Organochlorine Pesticides by Method 8081A													
Aldrin	mg/kg	< 0.000748 U	< 0.000756 U	< 0.000779 U	< 0.000787 U	< 0.000785 U	< 0.000750 U	< 0.000744 U	< 0.000800 U	< 0.000768 U	< 0.000791 U	< 0.000767 UJ	< 0.000791 U
Chlordane (technical)	mg/kg	< 0.0117 U	< 0.0118 U	< 0.0121 U	< 0.0123 U	< 0.0122 U	< 0.0117 U	< 0.0116 U	< 0.0125 U	< 0.0120 U	< 0.0123 U	< 0.0120 U	< 0.0123 U
DDT	mg/kg	< 0.00110 U	< 0.00111 U	< 0.00114 U	< 0.00116 U	< 0.00115 U	< 0.00110 U	< 0.00109 U	< 0.00117 U	< 0.00113 U	< 0.00116 U	< 0.00113 UJ	< 0.00116 U
Dieldrin	mg/kg	< 0.00107 U	< 0.00108 U	< 0.00111 U	< 0.00112 U	< 0.00112 U	< 0.00107 U	< 0.00106 U	< 0.00114 U	< 0.00110 U	< 0.00113 U	< 0.00110 UJ	< 0.00113 U
Endosulfan I	mg/kg	< 0.00117 U	< 0.00118 U	< 0.00121 U	< 0.00123 U	< 0.00122 U	< 0.00117 U	< 0.00116 U	< 0.00125 U	< 0.00120 U	< 0.00123 U	< 0.00120 UJ	< 0.00123 U
Endosulfan II	mg/kg	< 0.00144 U	< 0.00145 U	< 0.00150 U	< 0.00151 U	< 0.00151 U	< 0.00144 U	< 0.00143 U	< 0.00154 U	< 0.00148 U	< 0.00152 U	< 0.00147 UJ	< 0.00152 U
Endosulfan sulfate	mg/kg	< 0.00124 U	< 0.00126 U	< 0.00129 U	< 0.00131 U	< 0.00130 U	< 0.00125 U	< 0.00124 U	< 0.00133 U	< 0.00128 U	< 0.00132 U	< 0.00127 UJ	< 0.00131 U
Endrin	mg/kg	< 0.00184 U	< 0.00187 U	< 0.00192 U	< 0.00194 U	< 0.00194 U	< 0.00185 U	< 0.00184 U	< 0.00198 U	< 0.00189 U	< 0.00195 U	< 0.00189 U	< 0.00195 U
Endrin aldehyde	mg/kg	< 0.00127 U	< 0.00129 U	< 0.00132 U	< 0.00134 U	< 0.00134 U	< 0.00128 U	< 0.00127 U	< 0.00136 U	< 0.00131 U	< 0.00135 U	< 0.00130 UJ	< 0.00134 U

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Table 2. Background Soil Analytical Results
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Compound	Units	Cell 29-BG-S-3-4-210302	Cell 30-BG-S-3-4-210302	Cell 31-BG-S-3-4-210303	Cell 32-BG-S-3-4-210303	Cell 33 -BG-S-3-4-210304	Cell 34 -BG-S-3-4-210305	Cell 35 -BG-S-3-4-210308	Cell 36-BG-S-3-4-210309	Cell 37 -BG-S-3-4-210304	Cell 38 -BG-S-3-4-210305	Cell 39 -BG-S-3-4-210308	Cell 40-BG-S-3-4-210309
		3/2/2021	3/2/2021	3/3/2021	3/3/2021	3/4/2021	3/5/2021	3/8/2021	3/9/2021	3/4/2021	3/5/2021	3/8/2021	3/9/2021
Heptachlor	mg/kg	< 0.00153 U	< 0.00155 U	< 0.00160 U	< 0.00162 U	< 0.00161 U	< 0.00154 U	< 0.00153 U	< 0.00164 U	< 0.00158 U	< 0.00162 U	< 0.00157 UJ	< 0.00162 U
Heptachlor epoxide	mg/kg	< 0.00140 U	< 0.00141 U	< 0.00146 U	< 0.00147 U	< 0.00147 U	< 0.00140 U	< 0.00139 U	< 0.00150 U	< 0.00144 U	< 0.00148 U	< 0.00143 UJ	< 0.00148 U
Hexachlorocyclohexane, alpha-	mg/kg	< 0.000883 U	< 0.000894 U	< 0.000920 U	< 0.000930 U	< 0.000928 U	< 0.000887 U	< 0.000879 U	< 0.000946 U	< 0.000907 U	< 0.000935 U	< 0.000906 UJ	< 0.000934 U
Hexachlorocyclohexane, beta-	mg/kg	< 0.00168 U	< 0.00170 U	< 0.00175 U	< 0.00177 U	< 0.00176 U	< 0.00169 U	< 0.00167 U	< 0.00180 U	< 0.00172 U	< 0.00178 U	< 0.00172 UJ	< 0.00178 U
Hexachlorocyclohexane, delta-	mg/kg	< 0.00164 U	< 0.00166 U	< 0.00171 U	< 0.00173 U	< 0.00172 U	< 0.00165 U	< 0.00163 U	< 0.00176 U	< 0.00168 U	< 0.00174 U	< 0.00168 UJ	< 0.00174 U
Hexachlorocyclohexane, gamma-	mg/kg	< 0.00174 U	< 0.00176 U	< 0.00181 U	< 0.00183 U	< 0.00182 U	< 0.00174 U	< 0.00173 U	< 0.00186 U	< 0.00178 U	< 0.00184 U	< 0.00178 UJ	< 0.00184 U
Toxaphene	mg/kg	< 0.0243 U	< 0.0246 U	< 0.0253 U	< 0.0256 U	< 0.0255 U	< 0.0244 U	< 0.0242 U	< 0.0260 U	< 0.0249 U	< 0.0257 U	< 0.0249 U	< 0.0257 U
Polychlorinated Biphenyls (PCBs) by Method 8082A													
Aroclor 1016	mg/kg	< 0.00504 U	< 0.00531 U	< 0.00504 U	< 0.00520 U	< 0.00500 U	< 0.00542 U	< 0.00506 U	< 0.00504 U	< 0.00513 U	< 0.00481 U	< 0.00507 U	< 0.00498 U
Aroclor 1221	mg/kg	< 0.00504 U	< 0.00531 U	< 0.00504 U	< 0.00520 U	< 0.00500 U	< 0.00542 U	< 0.00506 U	< 0.00504 U	< 0.00513 U	< 0.00481 U	< 0.00507 U	< 0.00498 U
Aroclor 1232	mg/kg	< 0.00504 U	< 0.00531 U	< 0.00504 U	< 0.00520 U	< 0.00500 U	< 0.00542 U	< 0.00506 U	< 0.00504 U	< 0.00513 U	< 0.00481 U	< 0.00507 U	< 0.00498 U
Aroclor 1242	mg/kg	< 0.00504 U	< 0.00531 U	< 0.00504 U	< 0.00520 U	< 0.00500 U	< 0.00542 U	< 0.00506 U	< 0.00504 U	< 0.00513 U	< 0.00481 U	< 0.00507 U	< 0.00498 U
Aroclor 1248	mg/kg	< 0.00504 U	< 0.00531 U	< 0.00504 U	< 0.00520 U	< 0.00500 U	< 0.00542 U	< 0.00506 U	< 0.00504 U	< 0.00513 U	< 0.00481 U	< 0.00507 U	< 0.00498 U
Aroclor 1254	mg/kg	< 0.00504 U	< 0.00531 U	< 0.00504 U	< 0.00520 U	< 0.00500 U	< 0.00542 U	< 0.00506 U	< 0.00504 U	< 0.00513 U	< 0.00481 U	< 0.00507 U	< 0.00498 U
Aroclor 1260	mg/kg	< 0.00987 U	< 0.0104 U	< 0.00989 U	< 0.0102 U	< 0.00980 U	< 0.0106 U	< 0.00991 U	< 0.00987 U	< 0.0101 U	< 0.00943 U	< 0.00994 U	< 0.00976 U
Nitroaromatics & Nitramines by Method 8330B													
2,4,6-Trinitrotoluene	mg/kg	< 0.0304 U	< 0.0293 U	< 0.0304 U	< 0.0288 U	< 0.0283 U	< 0.0299 U	< 0.0289 U	< 0.0286 U	< 0.0280 U	< 0.0299 U	< 0.0299 U	< 0.0288 U
Hexahydro-1,3,5-trinitro-1,3,5-triazine	mg/kg	< 0.0426 U	< 0.0411 U	< 0.0426 U	< 0.0404 U	< 0.0397 U	< 0.0418 U	< 0.0404 U	< 0.0401 U	< 0.0392 U	< 0.0418 U	< 0.0419 U	< 0.0403 U
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	mg/kg	< 0.0225 U	< 0.0217 U	< 0.0225 U	< 0.0213 U	< 0.0209 U	< 0.0221 U	< 0.0213 U	< 0.0212 U	< 0.0207 U	< 0.0221 U	< 0.0221 U	< 0.0213 U
Perchlorate by Method 6860													
Perchlorate	mg/kg	< 0.0000821 U	**0.000223 J**	< 0.0000800 U	**0.000107 J**	< 0.0000800 U	**0.000124 J**	**0.000156 J**	**0.000198 J**	< 0.0000822 U	**0.000219 J**	**0.000142 J**	**0.000132 J**
Fluorinated Alkyl Substances by Method DV-LC-0012													
Perfluorooctanoic acid (PFOA)	mg/kg	< 0.000226 U	< 0.000213 U	< 0.000218 U	< 0.000214 U	< 0.000216 U	< 0.000210 U	< 0.000215 U	< 0.000218 U	< 0.000218 U	< 0.000221 U	< 0.000214 U	< 0.000214 U
Perfluorooctanesulfonic acid (PFOS)	mg/kg	< 0.000137 U	< 0.000130 U	< 0.000133 U	< 0.000130 U	< 0.000132 U	< 0.000128 U	< 0.000131 U	< 0.000132 U	< 0.000133 U	< 0.000134 U	< 0.000130 U	< 0.000130 U
Perfluorohexanesulfonic acid (PFHxS)	mg/kg	< 0.000275 U	< 0.000260 U	< 0.000266 U	< 0.000260 U	< 0.000263 U	< 0.000255 U	< 0.000262 U	< 0.000265 U	< 0.000266 U	< 0.000269 U	< 0.000261 U	< 0.000260 U
Metals by Method 6020													
Antimony	mg/kg	< 1.86 UJ	< 1.87 UJ	< 1.93 UJ	< 1.88 UJ	< 0.192 U	< 0.187 UJ	< 0.179 U	< 1.84 U	< 0.171 U	< 0.442 UJ	< 0.171 U	< 1.77 U
Arsenic	mg/kg	< 3.72 U	< 3.75 U	< 3.86 U	**3.95 J**	**1.98**	**2.57**	**3.37**	< 3.68 U	**2.08**	**2.58**	**2.78**	< 3.55 U
Barium	mg/kg	**368 J**	**280 J**	**291 J**	**266 J**	**46.2**	**268**	**501**	**347**	**37.4**	**102**	**334**	**299**
Beryllium	mg/kg	< 0.372 U	< 0.375 U	< 0.386 U	< 0.376 U	**0.298**	**0.214**	**0.116**	< 0.368 U	**0.319**	**0.318**	**0.171**	< 0.355 U
Cadmium	mg/kg	< 0.223 U	< 0.225 U	< 0.231 U	< 0.225 U	**0.0392 J**	**0.0709**	**0.0576**	< 0.221 U	**0.0289 J**	< 0.0531 U	**0.0669**	< 0.213 U
Chromium	mg/kg	< 4.18 U	< 4.22 U	< 4.34 U	< 4.23 U	**4.93**	**3.55**	**2.05**	< 4.14 U	**5.08**	**4.94**	**3.12**	< 3.99 U
Copper	mg/kg	< 3.72 U	< 3.75 U	< 3.86 U	< 3.76 U	**1.86**	**1.85**	**1.14**	< 3.68 U	**1.97**	**2.17**	**1.80**	< 3.55 U
Iron	mg/kg	**2,570 J**	**2,670 J**	**2,500 J**	**1,970 J**	**4,900**	**3,630**	**1,890**	**2,860**	**5,330**	**5,310**	**3,080**	**1,980**
Lead	mg/kg	**1.82 J**	**1.98 J**	**1.93 J**	**1.30 J**	**4.20**	**2.84**	**1.44**	**2.02 J**	**4.50**	**4.08**	**2.29**	**1.36 J**
Manganese	mg/kg	**23.5**	**31.9**	**34.9**	**24.2**	**39.2**	**41.1**	**22.9**	**41.5**	**38.8**	**47.0**	**39.4**	**19.7**
Selenium	mg/kg	< 2.97 U	< 3.00 U	< 3.09 U	< 3.01 U	< 0.307 U	< 0.299 U	< 0.286 U	< 2.95 U	**0.279 J**	< 0.283 U	< 0.274 U	< 2.84 U
Silver	mg/kg	< 0.697 U	< 0.703 U	< 0.723 U	< 0.704 U	< 0.0720 U	< 0.0700 U	< 0.0671 U	< 0.691 U	< 0.0642 U	< 0.166 U	< 0.0641 U	< 0.665 U
Thallium	mg/kg	< 1.86 U	< 1.87 U	< 1.93 U	< 1.88 U	< 0.192 U	< 0.187 U	< 0.179 U	< 1.84 U	< 0.171 U	< 0.177 U	< 0.171 U	< 1.77 U
Uranium	mg/kg	**0.466 J**	**0.414 J**	**0.457 J**	**0.428 J**	**0.156**	**0.310**	**0.461**	**0.389 J**	**0.126**	**0.197**	**0.420**	**0.365 J**
Zinc	mg/kg	< 18.6 U	< 18.7 U	< 19.3 U	< 18.8 U	**8.67**	**7.23**	**4.52**	< 18.4 U	**9.72**	**9.82**	**7.10**	< 17.7 U
Mercury by Method 7471A													
Mercury	mg/kg	< 0.0322 UBJ	< 0.0321 UBJ	< 0.0294 UBJ	< 0.0309 UBJ	< 0.0310 UBJ	< 0.0301 UBJ	< 0.0322 UBJ	< 0.0295 UBJ	< 0.0303 UBJ	< 0.0297 UBJ	< 0.0303 UBJ	< 0.0290 UBJ
General Chemistry by Methods 9012B, SW846 9046D, and 9065													
Cyanide, Total	mg/kg	< 0.170 U	< 0.164 U	< 0.198 U	< 0.207 U	< 0.207 U	< 0.164 U	< 0.190 U	< 0.207 U	< 0.216 U	< 0.176 U	< 0.183 U	< 0.198 U
pH	SU	**8.1**	**8.0**	**8.4**	**8.3**	**8.2**	**8.1 J**	**8.3 J**	**8.2**	**8.2**	**7.7 J**	**8.3 J**	**8.0**
Phenols, Total	mg/kg	< 0.338 U	< 0.338 U	**2.20**	< 0.338 U	**0.429 J**	**5.59**	< 0.335 U	< 0.334 U	< 0.338 U	**2.40**	**0.408 J**	**0.358 J**
General Chemistry - Soluble by Method 9056A													
Chloride	mg/kg	**6.11 J**	**29.3**	**6.79 J**	**25.8**	**5.94 J**	**7.18 J**	**12.4**	**12.5**	< 4.82 U	**11.6**	**11.0**	**39.8**
Fluoride	mg/kg	**3.21**	**5.58**	**7.52**	**8.30**	**3.57**	**4.24**	**5.57**	**5.33**	**2.98**	**4.29**	**5.79**	**5.70**
Nitrate as N	mg/kg	**2.05 J**	**1.56 J**	**1.77 J**	**4.26 J**	**2.16 J**	**2.69 J**	**1.52 J**	**1.90 J**	R	**2.50 J**	**2.83 J**	R
Nitrate Nitrite as N	mg/kg	**4.39 J**	**1.56 J**	**2.92 J**	**4.26 J**	< 4.96 UBJ	< 5.08 UB	< 4.98 UB	< 5.13 UB	< 4.89 UB	< 4.99 UB	< 4.96 UB	< 0.277 U
Nitrite as N	mg/kg	**2.34 J**	R	**1.15 J**	R	< 4.96 UBJ	R	R	R	< 4.89 UBJ	R	< 4.96 UBJ	R
Sulfate	mg/kg	**28.1**	**158**	**65.3**	**125**	**23.6**	**45.1**	**49.5**	**51.1**	**18.0**	**85.3**	**52.4**	**935**

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Table 2. Background Soil Analytical Results
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Compound	Units	Cell 29-BG-S-3-4-210302	Cell 30-BG-S-3-4-210302	Cell 31-BG-S-3-4-210303	Cell 32-BG-S-3-4-210303	Cell 33 -BG-S-3-4-210304	Cell 34 -BG-S-3-4-210305	Cell 35 -BG-S-3-4-210308	Cell 36-BG-S-3-4-210309	Cell 37 -BG-S-3-4-210304	Cell 38 -BG-S-3-4-210305	Cell 39 -BG-S-3-4-210308	Cell 40-BG-S-3-4-210309
		3/2/2021	3/2/2021	3/3/2021	3/3/2021	3/4/2021	3/5/2021	3/8/2021	3/9/2021	3/4/2021	3/5/2021	3/8/2021	3/9/2021
General Chemistry - 7 Day Leach by Method SM2540C													
Total Dissolved Solids	mg/L	**171**	**160**	**132**	**164**	**270**	**177**	**112**	**168**	**370**	**180**	**141**	**524**
Radium-226 & Other Gamma Emitters by Method GA-01-R													
Radium-226	pCi/g	< 0.171 U	**0.817**	**0.788 Q**	**1.09**	**0.297 Q**	**0.356**	**0.895**	**0.842**	**0.366 Q**	**0.447 Q**	**0.677 Q**	**0.722 Q**
Radium-228	pCi/g	**0.583**	< 0.170 U	< 0.0506 U	< 0.0598 U	< 0.324 U	**0.176**	< 0.0895 U	< 0.115 U	**0.305**	**0.522**	**0.219 Q**	**0.214**
Combined Radium 226/228	pCi/g	**0.753**	**0.987**	**0.838**	**1.15**	**0.621**	**0.532**	**0.985**	**0.957**	**0.671**	**0.969**	**0.897**	**0.936**

Notes:
1. Background soil samples were collected from the vadose zone.
2. Detected concentrations are presented in bold font.
3. Non-detections are indicated with a "<" symbol. The associated numerical value is the method detection limit (MDL).

Unit Abbreviations:
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
pCi/g = average picocuries per gram
SU = standard unit

Data Validation Qualifers:
B = The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.
Q = Quantitative uncertainty is associated with sample results less than 1pCi/g and a reported uncertainty greater than 0.15 pCi/g or results greater than 1 pCi/g with a reported uncertainty greater than 0.15 times the result.
R = The sample results are rejected.
U = The compound was analyzed for but not detected. The associated value is the analyte instrument method detection limit (MDL).
UB = Compound considered non-detect at the listed value due to associated blank contamination.
UBJ = The compound was not detected above the reported sample quantification limit. However, the reported limit is approximate and may or may not represent the actual limit of quantification and the compound considered non-detect at the listed value due to associated blank contamination.
UJ = The compound was not detected above the reported sample quantification limit. However, the reported limit is approximate and may or may not represent the actual limit of quantification.

VOC Synonyms:
Tetrachloroethylene = Tetrachloroethene
1,1-Dichloroethylene = 1,1-Dichloroethene

SVOC Synonyms:
Bis(2-ethylhexyl)phthalate = Di (2-ethylhexyl)phthalate
N-Nitrosodibutylamine = N-Nitrosodi-n-butylamine
Benzo(b)fluoranthene = 3,4-Benzofluoranthene

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Table 3. Background Soil Descriptive Statistics (i.e., UTLs) for Datasets Including and Excluding Outliers [1,2]
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

Compound	Dataset	Sample Size	Detects	NDs	FOD	%NDs	Min ND	Max ND	Min Detect	Max Detect	Mean	Median	SD	95-95 UTL	
														Value	Basis
Volatile Organic Compounds (VOCs) by Method 8260B															
1,1,1-Trichloroethane	Full	12	0	12	0%	100%	0.000490	0.000558	NA	NA	NA	NA	NA	0.000558	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
1,1,2,2-Tetrachloroethane	Full	12	0	12	0%	100%	0.000373	0.000424	NA	NA	NA	NA	NA	0.000424	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000373	0.000381	NA	NA	NA	NA	NA	0.000381	Max Non-Detection (Detects = 0)
1,1,2-Trichloroethane	Full	12	0	12	0%	100%	0.000490	0.000558	NA	NA	NA	NA	NA	0.000558	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
1,1-Dichloroethane	Full	12	0	12	0%	100%	0.000578	0.000658	NA	NA	NA	NA	NA	0.000658	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000578	0.000591	NA	NA	NA	NA	NA	0.000591	Max Non-Detection (Detects = 0)
1,1-Dichloroethylene	Full	12	0	12	0%	100%	0.000490	0.000558	NA	NA	NA	NA	NA	0.000558	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
1,1-Dichloropropene	Full	12	0	12	0%	100%	0.000510	0.000580	NA	NA	NA	NA	NA	0.000580	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000510	0.000521	NA	NA	NA	NA	NA	0.000521	Max Non-Detection (Detects = 0)
1,2,4-Trichlorobenzene	Full	12	0	12	0%	100%	0.000951	0.00108	NA	NA	NA	NA	NA	0.00108	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000951	0.000972	NA	NA	NA	NA	NA	0.000972	Max Non-Detection (Detects = 0)
1,2-Dibromoethane	Full	12	0	12	0%	100%	0.000294	0.000335	NA	NA	NA	NA	NA	0.000335	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000294	0.000301	NA	NA	NA	NA	NA	0.000301	Max Non-Detection (Detects = 0)
1,2-Dichlorobenzene	Full	12	0	12	0%	100%	0.000245	0.000279	NA	NA	NA	NA	NA	0.000279	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000245	0.000251	NA	NA	NA	NA	NA	0.000251	Max Non-Detection (Detects = 0)
1,2-Dichloroethane	Full	12	0	12	0%	100%	0.000510	0.000580	NA	NA	NA	NA	NA	0.000580	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000510	0.000521	NA	NA	NA	NA	NA	0.000521	Max Non-Detection (Detects = 0)
1,2-Dichloropropane	Full	12	0	12	0%	100%	0.000490	0.000558	NA	NA	NA	NA	NA	0.000558	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
1,3-Dichlorobenzene	Full	12	0	12	0%	100%	0.000304	0.000346	NA	NA	NA	NA	NA	0.000346	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000304	0.000311	NA	NA	NA	NA	NA	0.000311	Max Non-Detection (Detects = 0)
1,3-Dichloropropene, Total	Full	12	0	12	0%	100%	0.000510	0.000580	NA	NA	NA	NA	NA	0.000580	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000510	0.000521	NA	NA	NA	NA	NA	0.000521	Max Non-Detection (Detects = 0)
1,4-Dichlorobenzene	Full	12	0	12	0%	100%	0.000314	0.000357	NA	NA	NA	NA	NA	0.000357	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000314	0.000321	NA	NA	NA	NA	NA	0.000321	Max Non-Detection (Detects = 0)
1,4-Dioxane	Full	12	0	12	0%	100%	0.0186	0.0212	NA	NA	NA	NA	NA	0.0212	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.0186	0.0190	NA	NA	NA	NA	NA	0.0190	Max Non-Detection (Detects = 0)
Acrolein	Full	12	0	12	0%	100%	0.00843	0.00960	NA	NA	NA	NA	NA	0.00960	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.00843	0.00862	NA	NA	NA	NA	NA	0.00862	Max Non-Detection (Detects = 0)
Acrylonitrile	Full	12	0	12	0%	100%	0.00353	0.00402	NA	NA	NA	NA	NA	0.00402	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.00353	0.00361	NA	NA	NA	NA	NA	0.00361	Max Non-Detection (Detects = 0)
Benzene	Full	12	0	12	0%	100%	0.000618	0.000703	NA	NA	NA	NA	NA	0.000703	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000618	0.000631	NA	NA	NA	NA	NA	0.000631	Max Non-Detection (Detects = 0)
Bromodichloromethane	Full	12	0	12	0%	100%	0.000196	0.000223	NA	NA	NA	NA	NA	0.000223	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000196	0.000200	NA	NA	NA	NA	NA	0.000200	Max Non-Detection (Detects = 0)
Bromomethane	Full	12	0	12	0%	100%	0.00108	0.00123	NA	NA	NA	NA	NA	0.00123	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.00108	0.00110	NA	NA	NA	NA	NA	0.00110	Max Non-Detection (Detects = 0)
Carbon Tetrachloride	Full	12	0	12	0%	100%	0.000500	0.000569	NA	NA	NA	NA	NA	0.000569	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000500	0.000511	NA	NA	NA	NA	NA	0.000511	Max Non-Detection (Detects = 0)
Chloroform	Full	12	0	12	0%	100%	0.000853	0.000971	NA	NA	NA	NA	NA	0.000971	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000853	0.000872	NA	NA	NA	NA	NA	0.000872	Max Non-Detection (Detects = 0)
Chloromethane	Full	12	0	12	0%	100%	0.00118	0.00134	NA	NA	NA	NA	NA	0.00134	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.00118	0.00120	NA	NA	NA	NA	NA	0.00120	Max Non-Detection (Detects = 0)
cis-1,2-dichloroethene	Full	12	0	12	0%	100%	0.000559	0.000636	NA	NA	NA	NA	NA	0.000636	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000559	0.000571	NA	NA	NA	NA	NA	0.000571	Max Non-Detection (Detects = 0)
cis-1,3-Dichloropropene	Full	12	0	12	0%	100%	0.000441	0.000502	NA	NA	NA	NA	NA	0.000502	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000441	0.000451	NA	NA	NA	NA	NA	0.000451	Max Non-Detection (Detects = 0)
Dichlorodifluoromethane	Full	12	0	12	0%	100%	0.000716	0.000815	NA	NA	NA	NA	NA	0.000815	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000716	0.000731	NA	NA	NA	NA	NA	0.000731	Max Non-Detection (Detects = 0)
Ethylbenzene	Full	12	0	12	0%	100%	0.000441	0.000502	NA	NA	NA	NA	NA	0.000502	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000441	0.000451	NA	NA	NA	NA	NA	0.000451	Max Non-Detection (Detects = 0)
Methyl tert-butyl ether (MTBE)	Full	12	0	12	0%	100%	0.000598	0.000681	NA	NA	NA	NA	NA	0.000681	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000598	0.000611	NA	NA	NA	NA	NA	0.000611	Max Non-Detection (Detects = 0)
Methylene Chloride	Full	12	0	12	0%	100%	0.00490	0.00558	NA	NA	NA	NA	NA	0.00558	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.00490	0.00501	NA	NA	NA	NA	NA	0.00501	Max Non-Detection (Detects = 0)
Monochlorobenzene	Full	12	0	12	0%	100%	0.000294	0.000335	NA	NA	NA	NA	NA	0.000335	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000294	0.000301	NA	NA	NA	NA	NA	0.000301	Max Non-Detection (Detects = 0)
Styrene	Full	12	0	12	0%	100%	0.000294	0.000335	NA	NA	NA	NA	NA	0.000335	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000294	0.000301	NA	NA	NA	NA	NA	0.000301	Max Non-Detection (Detects = 0)
Tetrachloroethylene (PCE)	Full	12	0	12	0%	100%	0.000725	0.000826	NA	NA	NA	NA	NA	0.000826	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000725	0.000741	NA	NA	NA	NA	NA	0.000741	Max Non-Detection (Detects = 0)
Toluene	Full	12	0	12	0%	100%	0.000882	0.00100	NA	NA	NA	NA	NA	0.00100	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000882	0.000902	NA	NA	NA	NA	NA	0.000902	Max Non-Detection (Detects = 0)
trans-1,2-Dichloroethene	Full	12	0	12	0%	100%	0.000490	0.000558	NA	NA	NA	NA	NA	0.000558	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
trans-1,3-Dichloropropene	Full	12	0	12	0%	100%	0.000510	0.000580	NA	NA	NA	NA	NA	0.000580	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000510	0.000521	NA	NA	NA	NA	NA	0.000521	Max Non-Detection (Detects = 0)
Tribromomethane	Full	12	0	12	0%	100%	0.000500	0.000569	NA	NA	NA	NA	NA	0.000569	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000500	0.000511	NA	NA	NA	NA	NA	0.000511	Max Non-Detection (Detects = 0)
Trichloroethylene (TCE)	Full	12	0	12	0%	100%	0.000275	0.000313	NA	NA	NA	NA	NA	0.000313	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000275	0.000281	NA	NA	NA	NA	NA	0.000281	Max Non-Detection (Detects = 0)

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Table 3. Background Soil Descriptive Statistics (i.e., UTLs) for Datasets Including and Excluding Outliers [1,2]
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Compound	Dataset	Sample Size	Detects	NDs	FOD	%NDs	Min ND	Max ND	Min Detect	Max Detect	Mean	Median	SD	95-95 UTL	
														Value	Basis
Trichlorofluoromethane	Full	12	0	12	0%	100%	0.000490	0.000558	NA	NA	NA	NA	NA	0.000558	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
Vinyl Chloride	Full	12	0	12	0%	100%	0.000588	0.000670	NA	NA	NA	NA	NA	0.000670	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000588	0.000601	NA	NA	NA	NA	NA	0.000601	Max Non-Detection (Detects = 0)
Xylenes, Total	Full	12	0	12	0%	100%	0.000490	0.000558	NA	NA	NA	NA	NA	0.000558	Max Non-Detection (Detects = 0)
	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
Pesticides by Method 8270D															
Prometon	Full	11	0	11	0%	100%	0.0117	0.0120	NA	NA	NA	NA	NA	0.0120	Max Non-Detection (Detects = 0)
Semivolatile Organic Compounds (SVOCs) by Method 8270D															
1,2,4,5-Tetrachlorobenzene	Full	11	0	11	0%	100%	0.0448	0.0490	NA	NA	NA	NA	NA	0.0490	Max Non-Detection (Detects = 0)
1,2-Diphenylhydrazine	Full	11	0	11	0%	100%	0.0201	0.0220	NA	NA	NA	NA	NA	0.0220	Max Non-Detection (Detects = 0)
1-Methylnaphthalene	Full	11	0	11	0%	100%	0.0102	0.0112	NA	NA	NA	NA	NA	0.0112	Max Non-Detection (Detects = 0)
2,4,5-Trichlorophenol	Full	11	0	11	0%	100%	0.00915	0.0100	NA	NA	NA	NA	NA	0.0100	Max Non-Detection (Detects = 0)
2,4,6-Trichlorophenol	Full	11	0	11	0%	100%	0.00915	0.0100	NA	NA	NA	NA	NA	0.0100	Max Non-Detection (Detects = 0)
2,4-Dichlorophenol	Full	11	0	11	0%	100%	0.00915	0.0100	NA	NA	NA	NA	NA	0.0100	Max Non-Detection (Detects = 0)
2,4-Dinitro-o-cresol	Full	11	0	11	0%	100%	0.302	0.330	NA	NA	NA	NA	NA	0.330	Max Non-Detection (Detects = 0)
2,4-Dinitrotoluene	Full	11	0	11	0%	100%	0.0604	0.0660	NA	NA	NA	NA	NA	0.0660	Max Non-Detection (Detects = 0)
2,6-Dinitrotoluene	Full	11	0	11	0%	100%	0.0256	0.0280	NA	NA	NA	NA	NA	0.0280	Max Non-Detection (Detects = 0)
2-Methylnaphthalene	Full	11	0	11	0%	100%	0.0174	0.0190	NA	NA	NA	NA	NA	0.0190	Max Non-Detection (Detects = 0)
Acenaphthene	Full	11	0	11	0%	100%	0.00942	0.0103	NA	NA	NA	NA	NA	0.0103	Max Non-Detection (Detects = 0)
Acenaphthylene	Full	11	0	11	0%	100%	0.0751	0.0821	NA	NA	NA	NA	NA	0.0821	Max Non-Detection (Detects = 0)
Anthracene	Full	11	0	11	0%	100%	0.0155	0.0170	NA	NA	NA	NA	NA	0.0170	Max Non-Detection (Detects = 0)
Atrazine	Full	11	0	11	0%	100%	0.0338	0.0370	NA	NA	NA	NA	NA	0.0370	Max Non-Detection (Detects = 0)
Benzidine	Full	11	0	11	0%	100%	0.905	0.990	NA	NA	NA	NA	NA	0.990	Max Non-Detection (Detects = 0)
Benzo(a)anthracene	Full	11	0	11	0%	100%	0.0183	0.0200	NA	NA	NA	NA	NA	0.0200	Max Non-Detection (Detects = 0)
Benzo(a)pyrene	Full	11	0	11	0%	100%	0.0183	0.0200	NA	NA	NA	NA	NA	0.0200	Max Non-Detection (Detects = 0)
Benzo(b)fluoranthene	Full	11	0	11	0%	100%	0.0240	0.0262	NA	NA	NA	NA	NA	0.0262	Max Non-Detection (Detects = 0)
Benzo(g,h,i)perylene	Full	11	0	11	0%	100%	0.0146	0.0160	NA	NA	NA	NA	NA	0.0160	Max Non-Detection (Detects = 0)
Benzo(k)fluoranthene	Full	11	0	11	0%	100%	0.0366	0.0400	NA	NA	NA	NA	NA	0.0400	Max Non-Detection (Detects = 0)
Bis(2-chloroethyl)ether	Full	11	0	11	0%	100%	0.0152	0.0166	NA	NA	NA	NA	NA	0.0166	Max Non-Detection (Detects = 0)
Bis(2-chloroisopropyl)ether	Full	11	0	11	0%	100%	0.0210	0.0230	NA	NA	NA	NA	NA	0.0230	Max Non-Detection (Detects = 0)
Bis(2-ethylhexyl)phthalate	Full	**11**	**3**	**8**	**27%**	**73%**	**0.0421**	**0.0460**	**0.0537**	**0.203**	**0.0693**	**0.169**	**0.0556**	**0.203**	**Max Detection (Detects < 4)**
	Outliers Removed	**9**	**1**	**8**	**11%**	**89%**	**0.0421**	**0.0460**	**0.0537**	**0.0537**	**0.0434**	**0.0537**	**0.00365**	**0.0537**	**Max Detection (Detects < 4)**
Chrysene	Full	11	0	11	0%	100%	0.0247	0.0270	NA	NA	NA	NA	NA	0.0270	Max Non-Detection (Detects = 0)
Dibenz(a,h)anthracene	Full	11	0	11	0%	100%	0.0174	0.0190	NA	NA	NA	NA	NA	0.0190	Max Non-Detection (Detects = 0)
Dibutylphthalate	Full	11	0	11	0%	100%	0.0265	0.0290	NA	NA	NA	NA	NA	0.0290	Max Non-Detection (Detects = 0)
Dichlorobenzidine, 3,3'-	Full	11	0	11	0%	100%	0.0823	0.0900	NA	NA	NA	NA	NA	0.0900	Max Non-Detection (Detects = 0)
Diethyl Phthalate	Full	11	0	11	0%	100%	0.0238	0.0260	NA	NA	NA	NA	NA	0.0260	Max Non-Detection (Detects = 0)
Dimethyl Phthalate	Full	11	0	11	0%	100%	0.0210	0.0230	NA	NA	NA	NA	NA	0.0230	Max Non-Detection (Detects = 0)
Dinitrophenols	Full	11	0	11	0%	100%	0.305	0.333	NA	NA	NA	NA	NA	0.333	Max Non-Detection (Detects = 0)
Fluoranthene	Full	11	0	11	0%	100%	0.0329	0.0360	NA	NA	NA	NA	NA	0.0360	Max Non-Detection (Detects = 0)
Fluorene	Full	11	0	11	0%	100%	0.0165	0.0180	NA	NA	NA	NA	NA	0.0180	Max Non-Detection (Detects = 0)
Hexachlorobenzene	Full	11	0	11	0%	100%	0.0265	0.0290	NA	NA	NA	NA	NA	0.0290	Max Non-Detection (Detects = 0)
Hexachlorobutadiene	Full	11	0	11	0%	100%	0.00915	0.0100	NA	NA	NA	NA	NA	0.0100	Max Non-Detection (Detects = 0)
Hexachlorocyclopentadiene	Full	11	0	11	0%	100%	0.102	0.111	NA	NA	NA	NA	NA	0.111	Max Non-Detection (Detects = 0)
Hexachloroethane	Full	11	0	11	0%	100%	0.0195	0.0213	NA	NA	NA	NA	NA	0.0213	Max Non-Detection (Detects = 0)
Indeno(1,2,3-cd)pyrene	Full	11	0	11	0%	100%	0.0201	0.0220	NA	NA	NA	NA	NA	0.0220	Max Non-Detection (Detects = 0)
Isophorone	Full	11	0	11	0%	100%	0.0155	0.0170	NA	NA	NA	NA	NA	0.0170	Max Non-Detection (Detects = 0)
Naphthalene	Full	11	0	11	0%	100%	0.0284	0.0310	NA	NA	NA	NA	NA	0.0310	Max Non-Detection (Detects = 0)
Nitrobenzene	Full	11	0	11	0%	100%	0.0201	0.0220	NA	NA	NA	NA	NA	0.0220	Max Non-Detection (Detects = 0)
N-Nitrosodibutylamine	Full	11	0	11	0%	100%	0.0884	0.0967	NA	NA	NA	NA	NA	0.0967	Max Non-Detection (Detects = 0)
N-Nitrosodiethylamine	Full	11	0	11	0%	100%	0.0595	0.0650	NA	NA	NA	NA	NA	0.0650	Max Non-Detection (Detects = 0)
N-Nitrosodimethylamine	Full	11	0	11	0%	100%	0.0338	0.0370	NA	NA	NA	NA	NA	0.0370	Max Non-Detection (Detects = 0)
N-Nitrosodiphenylamine	Full	11	0	11	0%	100%	0.0192	0.0210	NA	NA	NA	NA	NA	0.0210	Max Non-Detection (Detects = 0)
N-Nitrosopyrrolidine	Full	11	0	11	0%	100%	0.0585	0.0640	NA	NA	NA	NA	NA	0.0640	Max Non-Detection (Detects = 0)
Pentachlorobenzene	Full	11	0	11	0%	100%	0.0595	0.0650	NA	NA	NA	NA	NA	0.0650	Max Non-Detection (Detects = 0)
Pentachlorophenol	Full	11	0	11	0%	100%	0.302	0.330	NA	NA	NA	NA	NA	0.330	Max Non-Detection (Detects = 0)
Phenanthrene	Full	11	0	11	0%	100%	0.0155	0.0170	NA	NA	NA	NA	NA	0.0170	Max Non-Detection (Detects = 0)
Pyrene	Full	11	0	11	0%	100%	0.0111	0.0121	NA	NA	NA	NA	NA	0.0121	Max Non-Detection (Detects = 0)
Total Petroleum Hydrocarbons (TPH) - Gasoline Range Organics (GRO) by Method 8015C															
GRO (C6-C10)	Full	**12**	**1**	**11**	**8%**	**92%**	**0.0629**	**0.0652**	**0.0822**	**0.0822**	**0.0645**	**0.0822**	**0.00533**	**0.0822**	**Max Detection (Detects < 4)**
Total Petroleum Hydrocarbons (TPH) - Diesel Range Organics (DRO) and Oil Range Organics (ORO) by Method 8015B															
DRO (C10-C28)	Full	**12**	**2**	**10**	**17%**	**83%**	**33.2**	**36.2**	**56.9**	**72.3**	**38.4**	**64.6**	**12.1**	**72.3**	**Max Detection (Detects < 4)**
	Outliers Removed	10	0	10	0%	100%	33.2	36.2	NA	NA	NA	NA	NA	36.2	Max Non-Detection (Detects = 0)
ORO (C28-C36)	Full	12	0	12	0%	100%	33.2	36.2	NA	NA	NA	NA	NA	36.2	Max Non-Detection (Detects = 0)
Organochlorine Pesticides by Method 8081A															
Aldrin	Full	12	0	12	0%	100%	0.000744	0.000800	NA	NA	NA	NA	NA	0.000800	Max Non-Detection (Detects = 0)
Chlordane (technical)	Full	12	0	12	0%	100%	0.0116	0.0125	NA	NA	NA	NA	NA	0.0125	Max Non-Detection (Detects = 0)
DDT	Full	12	0	12	0%	100%	0.00109	0.00117	NA	NA	NA	NA	NA	0.00117	Max Non-Detection (Detects = 0)
Dieldrin	Full	12	0	12	0%	100%	0.00106	0.00114	NA	NA	NA	NA	NA	0.00114	Max Non-Detection (Detects = 0)
Endosulfan I	Full	12	0	12	0%	100%	0.00116	0.00125	NA	NA	NA	NA	NA	0.00125	Max Non-Detection (Detects = 0)
Endosulfan II	Full	12	0	12	0%	100%	0.00143	0.00154	NA	NA	NA	NA	NA	0.00154	Max Non-Detection (Detects = 0)
Endosulfan sulfate	Full	12	0	12	0%	100%	0.00124	0.00133	NA	NA	NA	NA	NA	0.00133	Max Non-Detection (Detects = 0)
Endrin	Full	12	0	12	0%	100%	0.00184	0.00198	NA	NA	NA	NA	NA	0.00198	Max Non-Detection (Detects = 0)
Endrin aldehyde	Full	12	0	12	0%	100%	0.00127	0.00136	NA	NA	NA	NA	NA	0.00136	Max Non-Detection (Detects = 0)
Heptachlor	Full	12	0	12	0%	100%	0.00153	0.00164	NA	NA	NA	NA	NA	0.00164	Max Non-Detection (Detects = 0)
Heptachlor epoxide	Full	12	0	12	0%	100%	0.00139	0.00150	NA	NA	NA	NA	NA	0.00150	Max Non-Detection (Detects = 0)

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Table 3. Background Soil Descriptive Statistics (i.e., UTLs) for Datasets Including and Excluding Outliers [1,2]
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Compound	Dataset	Sample Size	Detects	NDs	FOD	%NDs	Min ND	Max ND	Min Detect	Max Detect	Mean	Median	SD	95-95 UTL	
														Value	Basis
Hexachlorocyclohexane, alpha-	Full	12	0	12	0%	100%	0.000879	0.000946	NA	NA	NA	NA	NA	0.000946	Max Non-Detection (Detects = 0)
Hexachlorocyclohexane, beta-	Full	12	0	12	0%	100%	0.00167	0.00180	NA	NA	NA	NA	NA	0.00180	Max Non-Detection (Detects = 0)
Hexachlorocyclohexane, delta-	Full	12	0	12	0%	100%	0.00163	0.00176	NA	NA	NA	NA	NA	0.00176	Max Non-Detection (Detects = 0)
Hexachlorocyclohexane, gamma-	Full	12	0	12	0%	100%	0.00173	0.00186	NA	NA	NA	NA	NA	0.00186	Max Non-Detection (Detects = 0)
Toxaphene	Full	12	0	12	0%	100%	0.0242	0.0260	NA	NA	NA	NA	NA	0.0260	Max Non-Detection (Detects = 0)
Polychlorinated Biphenyls (PCBs) by Method 8082A															
Aroclor 1016	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1221	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1232	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1242	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1248	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1254	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1260	Full	12	0	12	0%	100%	0.00943	0.0106	NA	NA	NA	NA	NA	0.0106	Max Non-Detection (Detects = 0)
Nitroaromatics & Nitramines by Method 8330B															
2,4,6-Trinitrotoluene	Full	12	0	12	0%	100%	0.0280	0.0304	NA	NA	NA	NA	NA	0.0304	Max Non-Detection (Detects = 0)
Hexahydro-1,3,5-trinitro-1,3,5-triazine	Full	12	0	12	0%	100%	0.0392	0.0426	NA	NA	NA	NA	NA	0.0426	Max Non-Detection (Detects = 0)
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Full	12	0	12	0%	100%	0.0207	0.0225	NA	NA	NA	NA	NA	0.0225	Max Non-Detection (Detects = 0)
Perchlorate by Method 6860															
Perchlorate	Full	**12**	**8**	**4**	**67%**	**33%**	**0.0000800**	**0.0000822**	**0.000107**	**0.000223**	**0.000135**	**0.000149**	**0.0000519**	**0.00028**	**95/95 KM Normal UTL**
Fluorinated Alkyl Substances by Method DV-LC-0012															
Perfluorooctanoic acid (PFOA)	Full	12	0	12	0%	100%	0.000210	0.000226	NA	NA	NA	NA	NA	0.000226	Max Non-Detection (Detects = 0)
Perfluorooctanesulfonic acid (PFOS)	Full	12	0	12	0%	100%	0.000128	0.000137	NA	NA	NA	NA	NA	0.000137	Max Non-Detection (Detects = 0)
Perfluorohexanesulfonic acid (PFHxS)	Full	12	0	12	0%	100%	0.000255	0.000275	NA	NA	NA	NA	NA	0.000275	Max Non-Detection (Detects = 0)
Metals by Method 6020															
Antimony	Full	12	0	12	0%	100%	0.171	1.93	NA	NA	NA	NA	NA	1.93	Max Non-Detection (Detects = 0)
Arsenic	Full	**12**	**7**	**5**	**58%**	**42%**	**3.55**	**3.86**	**1.98**	**3.95**	**2.68**	**2.58**	**0.585**	**4.28**	**95/95 KM Normal UTL**
Barium	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**37.4**	**501**	**262**	**286**	**137**	**636**	**95/95 Normal UTL**
Beryllium	Full	**12**	**6**	**6**	**50%**	**50%**	**0.355**	**0.386**	**0.116**	**0.319**	**0.239**	**0.256**	**0.0780**	**0.45**	**95/95 KM Normal UTL**
Cadmium	Full	**12**	**5**	**7**	**42%**	**58%**	**0.0531**	**0.231**	**0.0289**	**0.0709**	**0.0496**	**0.0576**	**0.0164**	**0.095**	**95/95 KM Normal UTL**
Chromium	Full	**12**	**6**	**6**	**50%**	**50%**	**3.99**	**4.34**	**2.05**	**5.08**	**3.43**	**4.24**	**1.05**	**6.31**	**95/95 KM Normal UTL**
Copper	Full	**12**	**6**	**6**	**50%**	**50%**	**3.55**	**3.86**	**1.14**	**2.17**	**1.80**	**1.86**	**0.318**	**2.67**	**95/95 KM Normal UTL**
Iron	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**1,890**	**5,330**	**3,224**	**2,765**	**1,282**	**6,731**	**95/95 Normal UTL**
Lead	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**1.30**	**4.50**	**2.48**	**2.00**	**1.16**	**5.64**	**95/95 Normal UTL**
Manganese	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**19.7**	**47.0**	**33.7**	**36.9**	**9.01**	**58.3**	**95/95 Normal UTL**
Selenium	Full	**12**	**1**	**11**	**8%**	**92%**	**0.274**	**3.09**	**0.279**	**0.279**	**0.277**	**0.279**	**0.00250**	**0.279**	**Max Detection (Detects < 4)**
Silver	Full	12	0	12	0%	100%	0.0641	0.723	NA	NA	NA	NA	NA	0.723	Max Non-Detection (Detects = 0)
Thallium	Full	12	0	12	0%	100%	0.171	1.93	NA	NA	NA	NA	NA	1.93	Max Non-Detection (Detects = 0)
Uranium	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**0.126**	**0.466**	**0.349**	**0.402**	**0.123**	**0.69**	**95/95 Normal UTL**
Zinc	Full	**12**	**6**	**6**	**50%**	**50%**	**17.7**	**19.3**	**4.52**	**9.82**	**7.84**	**7.95**	**1.83**	**12.9**	**95/95 KM Normal UTL**
Mercury by Method 7471A															
Mercury	Full	12	0	12	0%	100%	0.0290	0.0322	NA	NA	NA	NA	NA	0.0322	Max Non-Detection (Detects = 0)
General Chemistry by Methods 9012B, SW846 9046D, and 9065															
Cyanide, Total	Full	12	0	12	0%	100%	0.164	0.216	NA	NA	NA	NA	NA	0.216	Max Non-Detection (Detects = 0)
pH	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**7.7**	**8.4**	**8.2**	**8.2**	**0.2**	**8.7**	**95/95 Normal UTL**
Phenols, Total	Full	**12**	**6**	**6**	**50%**	**50%**	**0.334**	**0.340**	**0.358**	**5.59**	**1.12**	**1.32**	**1.53**	**5.30**	**95/95 KM Normal UTL**
	Outlier Removed	**11**	**5**	**6**	**45%**	**55%**	**0.334**	**0.338**	**0.358**	**2.4**	**0.71**	**0.429**	**0.75**	**3.85**	**95/95 KM Lognormal UTL**
General Chemistry - Soluble by Method 9056A															
Chloride	Full	**12**	**11**	**1**	**92%**	**8%**	**4.82**	**4.82**	**5.94**	**39.8**	**14.4**	**11.6**	**10.7**	**53.7**	**95/95 WH Gamma UTL**
Fluoride	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**2.98**	**8.30**	**5.17**	**5.45**	**1.63**	**9.63**	**95/95 Normal UTL**
Nitrate as N	Full	**10**	**10**	**0**	**100%**	**0%**	**NA**	**NA**	**1.52**	**4.26**	**2.32**	**2.11**	**0.816**	**4.70**	**95/95 Normal UTL**
	Outlier Removed	**9**	**9**	**0**	**100%**	**0%**	**NA**	**NA**	**1.52**	**2.83**	**2.11**	**2.05**	**0.477**	**3.56**	**95/95 Normal UTL**
Nitrate Nitrite as N	Full	**12**	**4**	**8**	**33%**	**67%**	**0.277**	**5.13**	**1.56**	**4.39**	**2.68**	**3.59**	**1.58**	**7.01**	**95/95 KM Normal UTL**
Nitrite as N	Full	**5**	**2**	**3**	**40%**	**60%**	**4.89**	**4.96**	**1.15**	**2.34**	**1.75**	**1.75**	**0.595**	**2.34**	**Max Detection (Detects < 4)**
Sulfate	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**18.0**	**935**	**136**	**51.8**	**255**	**1,168**	**95/95 Lognormal UTL**
	Outlier Removed	**11**	**11**	**0**	**100%**	**0%**	**NA**	**NA**	**18.0**	**158**	**63.8**	**51.1**	**43.5**	**186**	**95/95 Normal UTL**
General Chemistry - 7 Day Leach by Method SM2540C															
Total Dissolved Solids	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**112**	**524**	**214**	**170**	**120**	**524**	**95/95 Non-Parametric UTL**
	Outliers Removed	**10**	**10**	**0**	**100%**	**0%**	**NA**	**NA**	**112**	**270**	**168**	**166**	**42.0**	**290**	**95/95 Normal UTL**
Radium-226 & Other Gamma Emitters by Method GA-01-R															
Radium-226	Full	**12**	**11**	**1**	**92%**	**8%**	**0.171**	**0.171**	**0.297**	**1.09**	**0.622**	**0.722**	**0.273**	**1.37**	**95/95 KM Normal UTL**
Radium-228	Full	**12**	**6**	**6**	**50%**	**50%**	**0.0506**	**0.324**	**0.176**	**0.583**	**0.200**	**0.262**	**0.180**	**0.69**	**95/95 KM Normal UTL**
Combined Radium 226/228	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**0.532**	**1.15**	**0.858**	**0.917**	**0.180**	**1.35**	**95/95 Normal UTL**

Abbreviations:
KM : Kaplan-Meier
FOD : frequency of detection
ND : non-detection
SD : standard deviation
UTL : upper tolerance limit (95% confidence level around the 95th percentile)

Notes:
1. Min ND, Max ND, Min Detect, Max Detect, Mean, Median, SD, and 95/95 UTL are in units milligrams per kilogram (mg/kg) for VOCs, Pesticides, SVOCs, TPH-GRO, TPH-DRO & ORO, Organochlorine Pesticides, PCBs, Nitroaromatics & Nitramines, Perchlorate, Fluorinated Alkyl Substances, Metals, Mercury, General Chemisty (with the exception of pH), and General Chemistry - Soluble; are in units milligrams per liter (mg/L) for Total Dissolved Solids; are in units average picocuries per gram (pCi/g) for Radium-226 & Other Gamma Emitters; and are in standard units (SU) for pH.
2. Compounds with one or more detection have their results presented in bold font.

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Table 4. Outlier Evaluation
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Potential Outlier Identification							Outlier Analysis				
Analyte	Well Identification	Sample ID	Sample Date	Analytical Result	Units	Potential Outlier Rationale	Distribution After Outlier Removal	Statistical Outlier?[1]	P-Value	Excluded from Dataset?	Rationale for Inclusion or Exclusion
Bis(2-ethylhexyl)phthalate	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0537 J	mg/kg	Greater than 75th + 3xIQR	<5 detects	--	--	No	Included due to visual inspection
Bis(2-ethylhexyl)phthalate	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.169 J	mg/kg	Greater than first potential outlier	<5 detects	--	--	Yes	Excluded due to visual inspection
Bis(2-ethylhexyl)phthalate	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.203 J	mg/kg	Greater than first potential outlier	<5 detects	--	--	Yes	Excluded due to visual inspection
DRO (C10-C28)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	56.9	mg/kg	Greater than 75th + 3xIQR	<5 detects	--	--	Yes	Excluded due to visual inspection
DRO (C10-C28)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	72.3	mg/kg	Greater than first potential outlier	<5 detects	--	--	Yes	Excluded due to visual inspection
Barium	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	501	mg/kg	Visual inspection - Request from Regulator	Nonparametric	--	--	No	Less than 75th + 3xIQR
Chloride	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	39.8	mg/kg	Visual inspection - Request from Regulator	Lognormal	No	--	No	Included due to Dixon's outlier test.
Nitrate as N	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	4.26 J	mg/kg	Visual inspection - Request from Regulator	Normal	Yes	5%	Yes	Excluded due to Dixon's outlier test.
Phenols, Total	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	5.59	mg/kg	Greater than 75th + 3xIQR	Nonparametric	--	--	Yes	Excluded due to visual inspection
Sulfate	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	935	mg/kg	Greater than 75th + 3xIQR	Normal	Yes	1%	Yes	Excluded due to Dixon's outlier test.
Total Dissolved Solids	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	370	mg/L	Greater than 75th + 3xIQR	Normal	Yes	1%	Yes	Excluded due to Dixon's outlier test.
Total Dissolved Solids	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	524	mg/L	Greater than first potential outlier	Normal	--	--	Yes	Excluded because lesser potential outlier is a statistical outlier.

Notes:

[1] Statistical outlier tests were performed using raw data for normal distributions and using log-transformed data for lognormal distributions. Statistical outlier tests were not performed for nonparametric or gamma distributions.

Acronyms and Abbreviations:

ID : identification
IQR : interquartile range
mg/kg : milligram per kilogram
mg/L : milligram per liter
p-value : probability value
-- : not available/not analyzed
% : percent
> : greater than

Qualifiers:

J : The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

Table 5. Summary of Elevated Nondetect Results
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Analyte	Well Identification	Sample ID	Sample Date	Analytical Result	Units
1,1,1-Trichloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558 U	mg/kg
1,1,2,2-Tetrachloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000424 U	mg/kg
1,1,2-Trichloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558 U	mg/kg
1,1-Dichloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000658 U	mg/kg
1,1-Dichloroethylene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558 U	mg/kg
1,1-Dichloropropene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00058 U	mg/kg
1,2,4-Trichlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00108 U	mg/kg
1,2-Dibromoethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000335 U	mg/kg
1,2-Dichlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000279 U	mg/kg
1,2-Dichloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00058 U	mg/kg
1,2-Dichloropropane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558 U	mg/kg
1,3-Dichlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000346 U	mg/kg
1,3-Dichloropropene, Total	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00058 U	mg/kg
1,4-Dichlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000357 U	mg/kg
1,4-Dioxane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0212 U	mg/kg
Acrolein	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0096 U	mg/kg
Acrylonitrile	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00402 U	mg/kg
Benzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000703 U	mg/kg
Bromodichloromethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000223 U	mg/kg
Bromomethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00123 U	mg/kg
Chloromethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00134 U	mg/kg
cis-1,2-Dichloroethene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000636 U	mg/kg
cis-1,3-Dichloropropene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000502 U	mg/kg
Dichlorodifluoromethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000815 U	mg/kg
Ethylbenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000502 U	mg/kg
Methyl tert-butyl ether (MTBE	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000681 U	mg/kg
Methylene chloride	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00558 U	mg/kg
Monochlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000335 U	mg/kg
Styrene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000335 U	mg/kg
Tetrachloroethylene (PCE)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000826 U	mg/kg
Toluene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0010 U	mg/kg
trans-1,2-Dichloroethene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558 U	mg/kg
trans-1,3-Dichloropropene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00058 U	mg/kg
Tribromomethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000569 U	mg/kg
Trichloroethylene (TCE)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000313 U	mg/kg
Trichlorofluoromethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558 U	mg/kg
Vinyl Chloride	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00067 U	mg/kg
Xylenes, Total	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558 U	mg/kg

Acronyms and Abbreviations:
ID : identification
mg/kg : milligram per kilogram

Qualifiers:
U : The analyte was analyzed for, but the result was not detected above the method detection limit.

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Table 6. Final Background Soil Descriptive Statistics (i.e., UTLs) for Datasets Excluding Outliers [1,2]
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Compound	Dataset	Sample Size	Detects	NDs	FOD	%NDs	Min ND	Max ND	Min Detect	Max Detect	Mean	Median	SD	95-95 UTL	
														Value	Basis
Volatile Organic Compounds (VOCs) by Method 8260B															
1,1,1-Trichloroethane	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
1,1,2,2-Tetrachloroethane	Outlier Removed	11	0	11	0%	100%	0.000373	0.000381	NA	NA	NA	NA	NA	0.000381	Max Non-Detection (Detects = 0)
1,1,2-Trichloroethane	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
1,1-Dichloroethane	Outlier Removed	11	0	11	0%	100%	0.000578	0.000591	NA	NA	NA	NA	NA	0.000591	Max Non-Detection (Detects = 0)
1,1-Dichloroethylene	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
1,1-Dichloropropene	Outlier Removed	11	0	11	0%	100%	0.000510	0.000521	NA	NA	NA	NA	NA	0.000521	Max Non-Detection (Detects = 0)
1,2,4-Trichlorobenzene	Outlier Removed	11	0	11	0%	100%	0.000951	0.000972	NA	NA	NA	NA	NA	0.000972	Max Non-Detection (Detects = 0)
1,2-Dibromoethane	Outlier Removed	11	0	11	0%	100%	0.000294	0.000301	NA	NA	NA	NA	NA	0.000301	Max Non-Detection (Detects = 0)
1,2-Dichlorobenzene	Outlier Removed	11	0	11	0%	100%	0.000245	0.000251	NA	NA	NA	NA	NA	0.000251	Max Non-Detection (Detects = 0)
1,2-Dichloroethane	Outlier Removed	11	0	11	0%	100%	0.000510	0.000521	NA	NA	NA	NA	NA	0.000521	Max Non-Detection (Detects = 0)
1,2-Dichloropropane	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
1,3-Dichlorobenzene	Outlier Removed	11	0	11	0%	100%	0.000304	0.000311	NA	NA	NA	NA	NA	0.000311	Max Non-Detection (Detects = 0)
1,3-Dichloropropene, Total	Outlier Removed	11	0	11	0%	100%	0.000510	0.000521	NA	NA	NA	NA	NA	0.000521	Max Non-Detection (Detects = 0)
1,4-Dichlorobenzene	Outlier Removed	11	0	11	0%	100%	0.000314	0.000321	NA	NA	NA	NA	NA	0.000321	Max Non-Detection (Detects = 0)
1,4-Dioxane	Outlier Removed	11	0	11	0%	100%	0.0186	0.0190	NA	NA	NA	NA	NA	0.0190	Max Non-Detection (Detects = 0)
Acrolein	Outlier Removed	11	0	11	0%	100%	0.00843	0.00862	NA	NA	NA	NA	NA	0.00862	Max Non-Detection (Detects = 0)
Acrylonitrile	Outlier Removed	11	0	11	0%	100%	0.00353	0.00361	NA	NA	NA	NA	NA	0.00361	Max Non-Detection (Detects = 0)
Benzene	Outlier Removed	11	0	11	0%	100%	0.000618	0.000631	NA	NA	NA	NA	NA	0.000631	Max Non-Detection (Detects = 0)
Bromodichloromethane	Outlier Removed	11	0	11	0%	100%	0.000196	0.000200	NA	NA	NA	NA	NA	0.000200	Max Non-Detection (Detects = 0)
Bromomethane	Outlier Removed	11	0	11	0%	100%	0.00108	0.00110	NA	NA	NA	NA	NA	0.00110	Max Non-Detection (Detects = 0)
Carbon Tetrachloride	Outlier Removed	11	0	11	0%	100%	0.000500	0.000511	NA	NA	NA	NA	NA	0.000511	Max Non-Detection (Detects = 0)
Chloroform	Outlier Removed	11	0	11	0%	100%	0.000853	0.000872	NA	NA	NA	NA	NA	0.000872	Max Non-Detection (Detects = 0)
Chloromethane	Outlier Removed	11	0	11	0%	100%	0.00118	0.00120	NA	NA	NA	NA	NA	0.00120	Max Non-Detection (Detects = 0)
cis-1,2-dichloroethene	Outlier Removed	11	0	11	0%	100%	0.000559	0.000571	NA	NA	NA	NA	NA	0.000571	Max Non-Detection (Detects = 0)
cis-1,3-Dichloropropene	Outlier Removed	11	0	11	0%	100%	0.000441	0.000451	NA	NA	NA	NA	NA	0.000451	Max Non-Detection (Detects = 0)
Dichlorodifluoromethane	Outlier Removed	11	0	11	0%	100%	0.000716	0.000731	NA	NA	NA	NA	NA	0.000731	Max Non-Detection (Detects = 0)
Ethylbenzene	Outlier Removed	11	0	11	0%	100%	0.000441	0.000451	NA	NA	NA	NA	NA	0.000451	Max Non-Detection (Detects = 0)
Methyl tert-butyl ether (MTBE)	Outlier Removed	11	0	11	0%	100%	0.000598	0.000611	NA	NA	NA	NA	NA	0.000611	Max Non-Detection (Detects = 0)
Methylene Chloride	Outlier Removed	11	0	11	0%	100%	0.00490	0.00501	NA	NA	NA	NA	NA	0.00501	Max Non-Detection (Detects = 0)
Monochlorobenzene	Outlier Removed	11	0	11	0%	100%	0.000294	0.000301	NA	NA	NA	NA	NA	0.000301	Max Non-Detection (Detects = 0)
Styrene	Outlier Removed	11	0	11	0%	100%	0.000294	0.000301	NA	NA	NA	NA	NA	0.000301	Max Non-Detection (Detects = 0)
Tetrachloroethylene (PCE)	Outlier Removed	11	0	11	0%	100%	0.000725	0.000741	NA	NA	NA	NA	NA	0.000741	Max Non-Detection (Detects = 0)
Toluene	Outlier Removed	11	0	11	0%	100%	0.000882	0.000902	NA	NA	NA	NA	NA	0.000902	Max Non-Detection (Detects = 0)
trans-1,2-Dichloroethene	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
trans-1,3-Dichloropropene	Outlier Removed	11	0	11	0%	100%	0.000510	0.000521	NA	NA	NA	NA	NA	0.000521	Max Non-Detection (Detects = 0)
Tribromomethane	Outlier Removed	11	0	11	0%	100%	0.000500	0.000511	NA	NA	NA	NA	NA	0.000511	Max Non-Detection (Detects = 0)
Trichloroethylene (TCE)	Outlier Removed	11	0	11	0%	100%	0.000275	0.000281	NA	NA	NA	NA	NA	0.000281	Max Non-Detection (Detects = 0)
Trichlorofluoromethane	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
Vinyl Chloride	Outlier Removed	11	0	11	0%	100%	0.000588	0.000601	NA	NA	NA	NA	NA	0.000601	Max Non-Detection (Detects = 0)
Xylenes, Total	Outlier Removed	11	0	11	0%	100%	0.000490	0.000501	NA	NA	NA	NA	NA	0.000501	Max Non-Detection (Detects = 0)
Pesticides by Method 8270D															
Prometon	Full	11	0	11	0%	100%	0.0117	0.0120	NA	NA	NA	NA	NA	0.0120	Max Non-Detection (Detects = 0)
Semivolatile Organic Compounds (SVOCs) by Method 8270D															
1,2,4,5-Tetrachlorobenzene	Full	11	0	11	0%	100%	0.0448	0.0490	NA	NA	NA	NA	NA	0.0490	Max Non-Detection (Detects = 0)
1,2-Diphenylhydrazine	Full	11	0	11	0%	100%	0.0201	0.0220	NA	NA	NA	NA	NA	0.0220	Max Non-Detection (Detects = 0)
1-Methylnaphthalene	Full	11	0	11	0%	100%	0.0102	0.0112	NA	NA	NA	NA	NA	0.0112	Max Non-Detection (Detects = 0)
2,4,5-Trichlorophenol	Full	11	0	11	0%	100%	0.00915	0.0100	NA	NA	NA	NA	NA	0.0100	Max Non-Detection (Detects = 0)
2,4,6-Trichlorophenol	Full	11	0	11	0%	100%	0.00915	0.0100	NA	NA	NA	NA	NA	0.0100	Max Non-Detection (Detects = 0)
2,4-Dichlorophenol	Full	11	0	11	0%	100%	0.00915	0.0100	NA	NA	NA	NA	NA	0.0100	Max Non-Detection (Detects = 0)
2,4-Dinitro-o-cresol	Full	11	0	11	0%	100%	0.302	0.330	NA	NA	NA	NA	NA	0.330	Max Non-Detection (Detects = 0)
2,4-Dinitrotoluene	Full	11	0	11	0%	100%	0.0604	0.0660	NA	NA	NA	NA	NA	0.0660	Max Non-Detection (Detects = 0)
2,6-Dinitrotoluene	Full	11	0	11	0%	100%	0.0256	0.0280	NA	NA	NA	NA	NA	0.0280	Max Non-Detection (Detects = 0)
2-Methylnaphthalene	Full	11	0	11	0%	100%	0.0174	0.0190	NA	NA	NA	NA	NA	0.0190	Max Non-Detection (Detects = 0)
Acenaphthene	Full	11	0	11	0%	100%	0.00942	0.0103	NA	NA	NA	NA	NA	0.0103	Max Non-Detection (Detects = 0)
Acenaphthylene	Full	11	0	11	0%	100%	0.0751	0.0821	NA	NA	NA	NA	NA	0.0821	Max Non-Detection (Detects = 0)
Anthracene	Full	11	0	11	0%	100%	0.0155	0.0170	NA	NA	NA	NA	NA	0.0170	Max Non-Detection (Detects = 0)
Atrazine	Full	11	0	11	0%	100%	0.0338	0.0370	NA	NA	NA	NA	NA	0.0370	Max Non-Detection (Detects = 0)
Benzidine	Full	11	0	11	0%	100%	0.905	0.990	NA	NA	NA	NA	NA	0.990	Max Non-Detection (Detects = 0)
Benzo(a)anthracene	Full	11	0	11	0%	100%	0.0183	0.0200	NA	NA	NA	NA	NA	0.0200	Max Non-Detection (Detects = 0)
Benzo(a)pyrene	Full	11	0	11	0%	100%	0.0183	0.0200	NA	NA	NA	NA	NA	0.0200	Max Non-Detection (Detects = 0)
Benzo(b)fluoranthene	Full	11	0	11	0%	100%	0.0240	0.0262	NA	NA	NA	NA	NA	0.0262	Max Non-Detection (Detects = 0)
Benzo(g,h,i)perylene	Full	11	0	11	0%	100%	0.0146	0.0160	NA	NA	NA	NA	NA	0.0160	Max Non-Detection (Detects = 0)
Benzo(k)fluoranthene	Full	11	0	11	0%	100%	0.0366	0.0400	NA	NA	NA	NA	NA	0.0400	Max Non-Detection (Detects = 0)
Bis(2-chloroethyl)ether	Full	11	0	11	0%	100%	0.0152	0.0166	NA	NA	NA	NA	NA	0.0166	Max Non-Detection (Detects = 0)
Bis(2-chloroisopropyl)ether	Full	11	0	11	0%	100%	0.0210	0.0230	NA	NA	NA	NA	NA	0.0230	Max Non-Detection (Detects = 0)
Bis(2-ethylhexyl)phthalate	Outliers Removed	**9**	**1**	**8**	**11%**	**89%**	**0.0421**	**0.0460**	**0.0537**	**0.0537**	**0.0434**	**0.0537**	**0.0037**	**0.0537**	**Max Detection (Detects < 4)**
Chrysene	Full	11	0	11	0%	100%	0.0247	0.0270	NA	NA	NA	NA	NA	0.0270	Max Non-Detection (Detects = 0)
Dibenz(a,h)anthracene	Full	11	0	11	0%	100%	0.0174	0.0190	NA	NA	NA	NA	NA	0.0190	Max Non-Detection (Detects = 0)
Dibutylphthalate	Full	11	0	11	0%	100%	0.0265	0.0290	NA	NA	NA	NA	NA	0.0290	Max Non-Detection (Detects = 0)
Dichlorobenzidine, 3,3'-	Full	11	0	11	0%	100%	0.0823	0.0900	NA	NA	NA	NA	NA	0.0900	Max Non-Detection (Detects = 0)
Diethyl Phthalate	Full	11	0	11	0%	100%	0.0238	0.0260	NA	NA	NA	NA	NA	0.0260	Max Non-Detection (Detects = 0)
Dimethyl Phthalate	Full	11	0	11	0%	100%	0.0210	0.0230	NA	NA	NA	NA	NA	0.0230	Max Non-Detection (Detects = 0)
Dinitrophenols	Full	11	0	11	0%	100%	0.305	0.333	NA	NA	NA	NA	NA	0.333	Max Non-Detection (Detects = 0)
Fluoranthene	Full	11	0	11	0%	100%	0.0329	0.0360	NA	NA	NA	NA	NA	0.0360	Max Non-Detection (Detects = 0)
Fluorene	Full	11	0	11	0%	100%	0.0165	0.0180	NA	NA	NA	NA	NA	0.0180	Max Non-Detection (Detects = 0)

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Table 6. Final Background Soil Descriptive Statistics (i.e., UTLs) for Datasets Excluding Outliers [1,2]
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Compound	Dataset	Sample Size	Detects	NDs	FOD	%NDs	Min ND	Max ND	Min Detect	Max Detect	Mean	Median	SD	95-95 UTL	
														Value	Basis
Hexachlorobenzene	Full	11	0	11	0%	100%	0.0265	0.0290	NA	NA	NA	NA	NA	0.0290	Max Non-Detection (Detects = 0)
Hexachlorobutadiene	Full	11	0	11	0%	100%	0.00915	0.0100	NA	NA	NA	NA	NA	0.0100	Max Non-Detection (Detects = 0)
Hexachlorocyclopentadiene	Full	11	0	11	0%	100%	0.102	0.111	NA	NA	NA	NA	NA	0.111	Max Non-Detection (Detects = 0)
Hexachloroethane	Full	11	0	11	0%	100%	0.0195	0.0213	NA	NA	NA	NA	NA	0.0213	Max Non-Detection (Detects = 0)
Indeno(1,2,3-cd)pyrene	Full	11	0	11	0%	100%	0.0201	0.0220	NA	NA	NA	NA	NA	0.0220	Max Non-Detection (Detects = 0)
Isophorone	Full	11	0	11	0%	100%	0.0155	0.0170	NA	NA	NA	NA	NA	0.0170	Max Non-Detection (Detects = 0)
Naphthalene	Full	11	0	11	0%	100%	0.0284	0.0310	NA	NA	NA	NA	NA	0.0310	Max Non-Detection (Detects = 0)
Nitrobenzene	Full	11	0	11	0%	100%	0.0201	0.0220	NA	NA	NA	NA	NA	0.0220	Max Non-Detection (Detects = 0)
N-Nitrosodibutylamine	Full	11	0	11	0%	100%	0.0884	0.0967	NA	NA	NA	NA	NA	0.0967	Max Non-Detection (Detects = 0)
N-Nitrosodiethylamine	Full	11	0	11	0%	100%	0.0595	0.0650	NA	NA	NA	NA	NA	0.0650	Max Non-Detection (Detects = 0)
N-Nitrosodimethylamine	Full	11	0	11	0%	100%	0.0338	0.0370	NA	NA	NA	NA	NA	0.0370	Max Non-Detection (Detects = 0)
N-Nitrosodiphenylamine	Full	11	0	11	0%	100%	0.0192	0.0210	NA	NA	NA	NA	NA	0.0210	Max Non-Detection (Detects = 0)
N-Nitrosopyrrolidine	Full	11	0	11	0%	100%	0.0585	0.0640	NA	NA	NA	NA	NA	0.0640	Max Non-Detection (Detects = 0)
Pentachlorobenzene	Full	11	0	11	0%	100%	0.0595	0.0650	NA	NA	NA	NA	NA	0.0650	Max Non-Detection (Detects = 0)
Pentachlorophenol	Full	11	0	11	0%	100%	0.302	0.330	NA	NA	NA	NA	NA	0.330	Max Non-Detection (Detects = 0)
Phenanthrene	Full	11	0	11	0%	100%	0.0155	0.0170	NA	NA	NA	NA	NA	0.0170	Max Non-Detection (Detects = 0)
Pyrene	Full	11	0	11	0%	100%	0.0111	0.0121	NA	NA	NA	NA	NA	0.0121	Max Non-Detection (Detects = 0)
Total Petroleum Hydrocarbons (TPH) - Gasoline Range Organics (GRO) by Method 8015C															
GRO (C6-C10)	Full	**12**	**1**	**11**	**8%**	**92%**	**0.0629**	**0.0652**	**0.0822**	**0.0822**	**0.0645**	**0.0822**	**0.00533**	**0.0822**	**Max Detection (Detects < 4)**
Total Petroleum Hydrocarbons (TPH) - Diesel Range Organics (DRO) and Oil Range Organics (ORO) by Method 8015B															
DRO (C10-C28)	Outliers Removed	10	0	10	0%	100%	33.2	36.2	NA	NA	NA	NA	NA	36.2	Max Non-Detection (Detects = 0)
ORO (C28-C36)	Full	12	0	12	0%	100%	33.2	36.2	NA	NA	NA	NA	NA	36.2	Max Non-Detection (Detects = 0)
Organochlorine Pesticides by Method 8081A															
Aldrin	Full	12	0	12	0%	100%	0.000744	0.000800	NA	NA	NA	NA	NA	0.000800	Max Non-Detection (Detects = 0)
Chlordane (technical)	Full	12	0	12	0%	100%	0.0116	0.0125	NA	NA	NA	NA	NA	0.0125	Max Non-Detection (Detects = 0)
DDT	Full	12	0	12	0%	100%	0.00109	0.00117	NA	NA	NA	NA	NA	0.00117	Max Non-Detection (Detects = 0)
Dieldrin	Full	12	0	12	0%	100%	0.00106	0.00114	NA	NA	NA	NA	NA	0.00114	Max Non-Detection (Detects = 0)
Endosulfan I	Full	12	0	12	0%	100%	0.00116	0.00125	NA	NA	NA	NA	NA	0.00125	Max Non-Detection (Detects = 0)
Endosulfan II	Full	12	0	12	0%	100%	0.00143	0.00154	NA	NA	NA	NA	NA	0.00154	Max Non-Detection (Detects = 0)
Endosulfan sulfate	Full	12	0	12	0%	100%	0.00124	0.00133	NA	NA	NA	NA	NA	0.00133	Max Non-Detection (Detects = 0)
Endrin	Full	12	0	12	0%	100%	0.00184	0.00198	NA	NA	NA	NA	NA	0.00198	Max Non-Detection (Detects = 0)
Endrin aldehyde	Full	12	0	12	0%	100%	0.00127	0.00136	NA	NA	NA	NA	NA	0.00136	Max Non-Detection (Detects = 0)
Heptachlor	Full	12	0	12	0%	100%	0.00153	0.00164	NA	NA	NA	NA	NA	0.00164	Max Non-Detection (Detects = 0)
Heptachlor epoxide	Full	12	0	12	0%	100%	0.00139	0.00150	NA	NA	NA	NA	NA	0.00150	Max Non-Detection (Detects = 0)
Hexachlorocyclohexane, alpha-	Full	12	0	12	0%	100%	0.000879	0.000946	NA	NA	NA	NA	NA	0.000946	Max Non-Detection (Detects = 0)
Hexachlorocyclohexane, beta-	Full	12	0	12	0%	100%	0.00167	0.00180	NA	NA	NA	NA	NA	0.00180	Max Non-Detection (Detects = 0)
Hexachlorocyclohexane, delta-	Full	12	0	12	0%	100%	0.00163	0.00176	NA	NA	NA	NA	NA	0.00176	Max Non-Detection (Detects = 0)
Hexachlorocyclohexane, gamma-	Full	12	0	12	0%	100%	0.00173	0.00186	NA	NA	NA	NA	NA	0.00186	Max Non-Detection (Detects = 0)
Toxaphene	Full	12	0	12	0%	100%	0.0242	0.0260	NA	NA	NA	NA	NA	0.0260	Max Non-Detection (Detects = 0)
Polychlorinated Biphenyls (PCBs) by Method 8082A															
Aroclor 1016	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1221	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1232	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1242	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1248	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1254	Full	12	0	12	0%	100%	0.00481	0.00542	NA	NA	NA	NA	NA	0.00542	Max Non-Detection (Detects = 0)
Aroclor 1260	Full	12	0	12	0%	100%	0.00943	0.0106	NA	NA	NA	NA	NA	0.0106	Max Non-Detection (Detects = 0)
Nitroaromatics & Nitramines by Method 8330B															
2,4,6-Trinitrotoluene	Full	12	0	12	0%	100%	0.0280	0.0304	NA	NA	NA	NA	NA	0.0304	Max Non-Detection (Detects = 0)
Hexahydro-1,3,5-trinitro-1,3,5-triazine	Full	12	0	12	0%	100%	0.0392	0.0426	NA	NA	NA	NA	NA	0.0426	Max Non-Detection (Detects = 0)
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Full	12	0	12	0%	100%	0.0207	0.0225	NA	NA	NA	NA	NA	0.0225	Max Non-Detection (Detects = 0)
Perchlorate by Method 6860															
Perchlorate	Full	**12**	**8**	**4**	**67%**	**33%**	**0.0000800**	**0.0000822**	**0.000107**	**0.000223**	**0.000135**	**0.000149**	**0.0000519**	**0.00028**	**95/95 KM Normal UTL**
Fluorinated Alkyl Substances by Method DV-LC-0012															
Perfluorooctanoic acid (PFOA)	Full	12	0	12	0%	100%	0.000210	0.000226	NA	NA	NA	NA	NA	0.000226	Max Non-Detection (Detects = 0)
Perfluorooctanesulfonic acid (PFOS)	Full	12	0	12	0%	100%	0.000128	0.000137	NA	NA	NA	NA	NA	0.000137	Max Non-Detection (Detects = 0)
Perfluorohexanesulfonic acid (PFHxS)	Full	12	0	12	0%	100%	0.000255	0.000275	NA	NA	NA	NA	NA	0.000275	Max Non-Detection (Detects = 0)
Metals by Method 6020															
Antimony	Full	12	0	12	0%	100%	0.171	1.93	NA	NA	NA	NA	NA	1.93	Max Non-Detection (Detects = 0)
Arsenic	Full	**12**	**7**	**5**	**58%**	**42%**	**3.55**	**3.86**	**1.98**	**3.95**	**2.68**	**2.58**	**0.585**	**4.28**	**95/95 KM Normal UTL**
Barium	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**37.4**	**501**	**262**	**286**	**137**	**636**	**95/95 Normal UTL**
Beryllium	Full	**12**	**6**	**6**	**50%**	**50%**	**0.355**	**0.386**	**0.116**	**0.319**	**0.239**	**0.256**	**0.0780**	**0.45**	**95/95 KM Normal UTL**
Cadmium	Full	**12**	**5**	**7**	**42%**	**58%**	**0.0531**	**0.231**	**0.0289**	**0.0709**	**0.0496**	**0.0576**	**0.0164**	**0.095**	**95/95 KM Normal UTL**
Chromium	Full	**12**	**6**	**6**	**50%**	**50%**	**3.99**	**4.34**	**2.05**	**5.08**	**3.43**	**4.24**	**1.05**	**6.31**	**95/95 KM Normal UTL**
Copper	Full	**12**	**6**	**6**	**50%**	**50%**	**3.55**	**3.86**	**1.14**	**2.17**	**1.80**	**1.86**	**0.318**	**2.67**	**95/95 KM Normal UTL**
Iron	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**1,890**	**5,330**	**3,224**	**2,765**	**1,282**	**6,731**	**95/95 Normal UTL**
Lead	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**1.30**	**4.50**	**2.48**	**2.00**	**1.16**	**5.64**	**95/95 Normal UTL**
Manganese	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**19.7**	**47.0**	**33.7**	**36.9**	**9.01**	**58.3**	**95/95 Normal UTL**
Selenium	Full	**12**	**1**	**11**	**8%**	**92%**	**0.274**	**3.09**	**0.279**	**0.279**	**0.277**	**0.279**	**0.00250**	**0.279**	**Max Detection (Detects < 4)**
Silver	Full	12	0	12	0%	100%	0.0641	0.723	NA	NA	NA	NA	NA	0.723	Max Non-Detection (Detects = 0)
Thallium	Full	12	0	12	0%	100%	0.171	1.93	NA	NA	NA	NA	NA	1.93	Max Non-Detection (Detects = 0)
Uranium	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**0.126**	**0.466**	**0.349**	**0.402**	**0.123**	**0.686**	**95/95 Normal UTL**
Zinc	Full	**12**	**6**	**6**	**50%**	**50%**	**17.7**	**19.3**	**4.52**	**9.82**	**7.84**	**7.95**	**1.83**	**12.9**	**95/95 KM Normal UTL**
Mercury by Method 7471A															
Mercury	Full	12	0	12	0%	100%	0.0290	0.0322	NA	NA	NA	NA	NA	0.0322	Max Non-Detection (Detects = 0)

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Received by OCD: 5/5/2022 7:41:01 AM

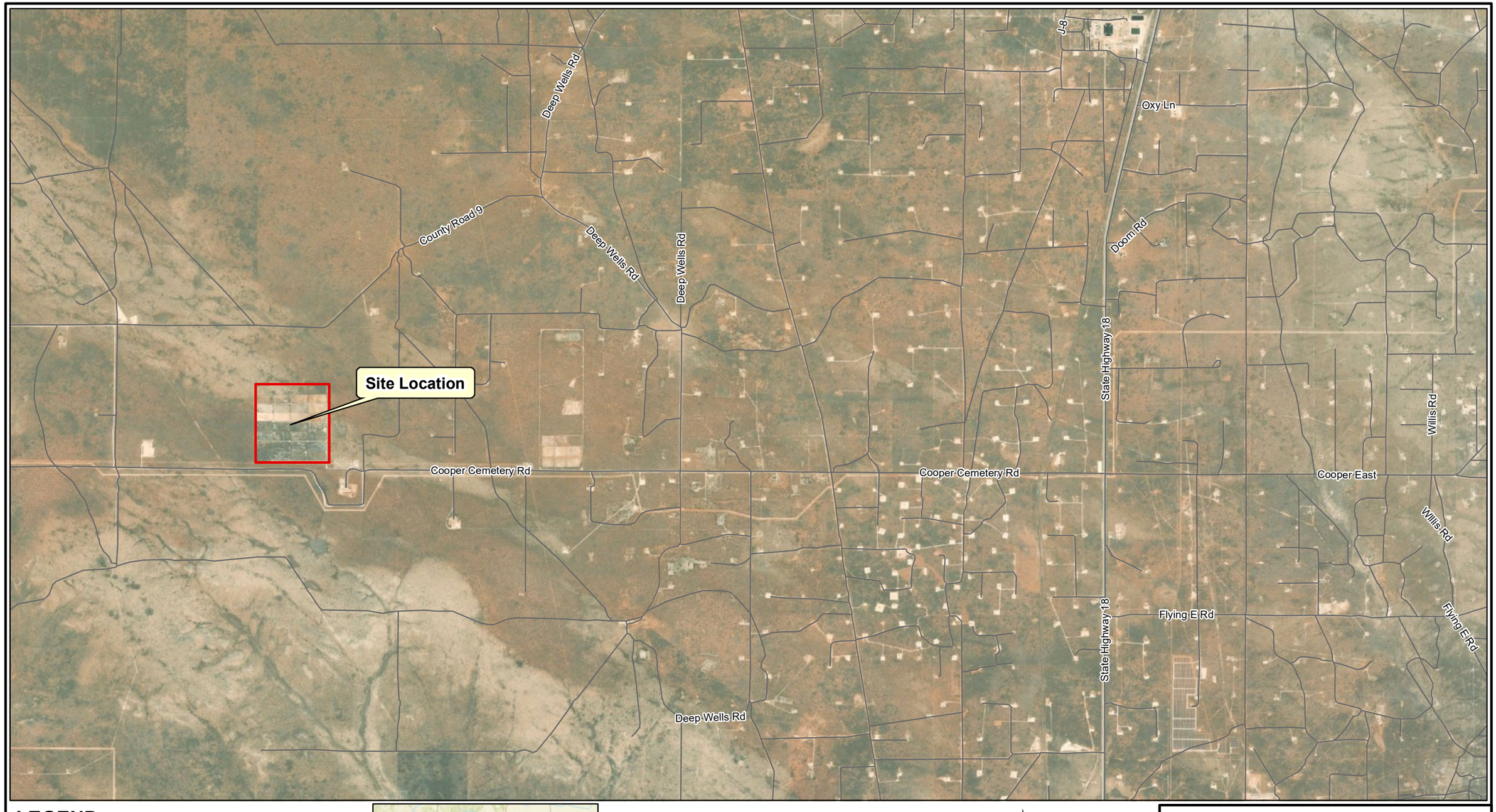
Table 6. Final Background Soil Descriptive Statistics (i.e., UTLs) for Datasets Excluding Outliers [1,2]
Background Sampling Report
Jal Landfarm (NM-02-0012)
Lea County, New Mexico

Compound	Dataset	Sample Size	Detects	NDs	FOD	%NDs	Min ND	Max ND	Min Detect	Max Detect	Mean	Median	SD	95-95 UTL	
														Value	Basis
General Chemistry by Methods 9012B, SW846 9046D, and 9065															
Cyanide, Total	Full	12	0	12	0%	100%	0.164	0.216	NA	NA	NA	NA	NA	0.216	Max Non-Detection (Detects = 0)
pH	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**7.7**	**8.4**	**8.2**	**8.2**	**0.2**	**8.67**	**95/95 Normal UTL**
Phenols, Total	Outlier Removed	**11**	**5**	**6**	**45%**	**55%**	**0.334**	**0.338**	**0.358**	**2.4**	**0.71**	**0.43**	**0.75**	**3.85**	**95/95 KM Lognormal UTL**
General Chemistry - Soluble by Method 9056A															
Chloride	Full	**12**	**11**	**1**	**92%**	**8%**	**4.82**	**4.82**	**5.94**	**39.8**	**14.4**	**11.6**	**10.7**	**53.7**	**95/95 WH Gamma UTL**
Fluoride	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**2.98**	**8.30**	**5.17**	**5.45**	**1.63**	**9.63**	**95/95 Normal UTL**
Nitrate as N	Outlier Removed	**9**	**9**	**0**	**100%**	**0%**	**NA**	**NA**	**1.52**	**2.83**	**2.11**	**2.05**	**0.477**	**3.56**	**95/95 Normal UTL**
Nitrate Nitrite as N	Full	**12**	**4**	**8**	**33%**	**67%**	**0.277**	**5.13**	**1.56**	**4.39**	**2.68**	**3.59**	**1.58**	**7.01**	**95/95 KM Normal UTL**
Nitrite as N	Full	**5**	**2**	**3**	**40%**	**60%**	**4.89**	**4.96**	**1.15**	**2.34**	**1.75**	**1.75**	**0.595**	**2.34**	**Max Detection (Detects < 4)**
Sulfate	Outlier Removed	**11**	**11**	**0**	**100%**	**0%**	**NA**	**NA**	**18.0**	**158**	**63.8**	**51.1**	**43.5**	**186**	**95/95 Normal UTL**
General Chemistry - 7 Day Leach by Method SM2540C															
Total Dissolved Solids	Outliers Removed	**10**	**10**	**0**	**100%**	**0%**	**NA**	**NA**	**112**	**270**	**168**	**166**	**42.0**	**290**	**95/95 Normal UTL**
Radium-226 & Other Gamma Emitters by Method GA-01-R															
Radium-226	Full	**12**	**11**	**1**	**92%**	**8%**	**0.171**	**0.171**	**0.297**	**1.09**	**0.622**	**0.722**	**0.273**	**1.37**	**95/95 KM Normal UTL**
Radium-228	Full	**12**	**6**	**6**	**50%**	**50%**	**0.0506**	**0.324**	**0.176**	**0.583**	**0.200**	**0.262**	**0.180**	**0.69**	**95/95 KM Normal UTL**
Combined Radium 226/228	Full	**12**	**12**	**0**	**100%**	**0%**	**NA**	**NA**	**0.532**	**1.15**	**0.858**	**0.917**	**0.180**	**1.35**	**95/95 Normal UTL**

Abbreviations:
KM : Kaplan-Meier
FOD : frequency of detection
ND : non-detection
SD : standard deviation
UTL : upper tolerance limit (95% confidence level around the 95th percentile)

Notes:
1. Min ND, Max ND, Min Detect, Max Detect, Mean, Median, SD, and 95/95 UTL are in units milligrams per kilogram (mg/kg) for VOCs, Pesticides, SVOCs, TPH-GRO, TPH-DRO & ORO, Organochlorine Pesticides, PCBs, Nitroaromatics & Nitramines, Perchlorate, Fluorinated Alkyl Substances, Metals, Mercury, General Chemisty (with the exception of pH), and General Chemistry - Soluble; are in units milligrams per liter (mg/L) for Total Dissolved Solids; are in units average picocuries per gram (pCi/g) for Radium-226 & Other Gamma Emitters; and are in standard units (SU) for pH.
2. Compounds with one or more detection have their results presented in bold font.

Figures



PATH: T:_ENV\CHEVRON_JAL-LANDFARM\GIS\MXD\2021-08\FIG_1_JAL_LANDFARM_2021.MXD SAVED: 8/11/2021 BY: KKELLEY

LEGEND

Landfarm Boundary



0 3,000 6,000

SCALE IN FEET

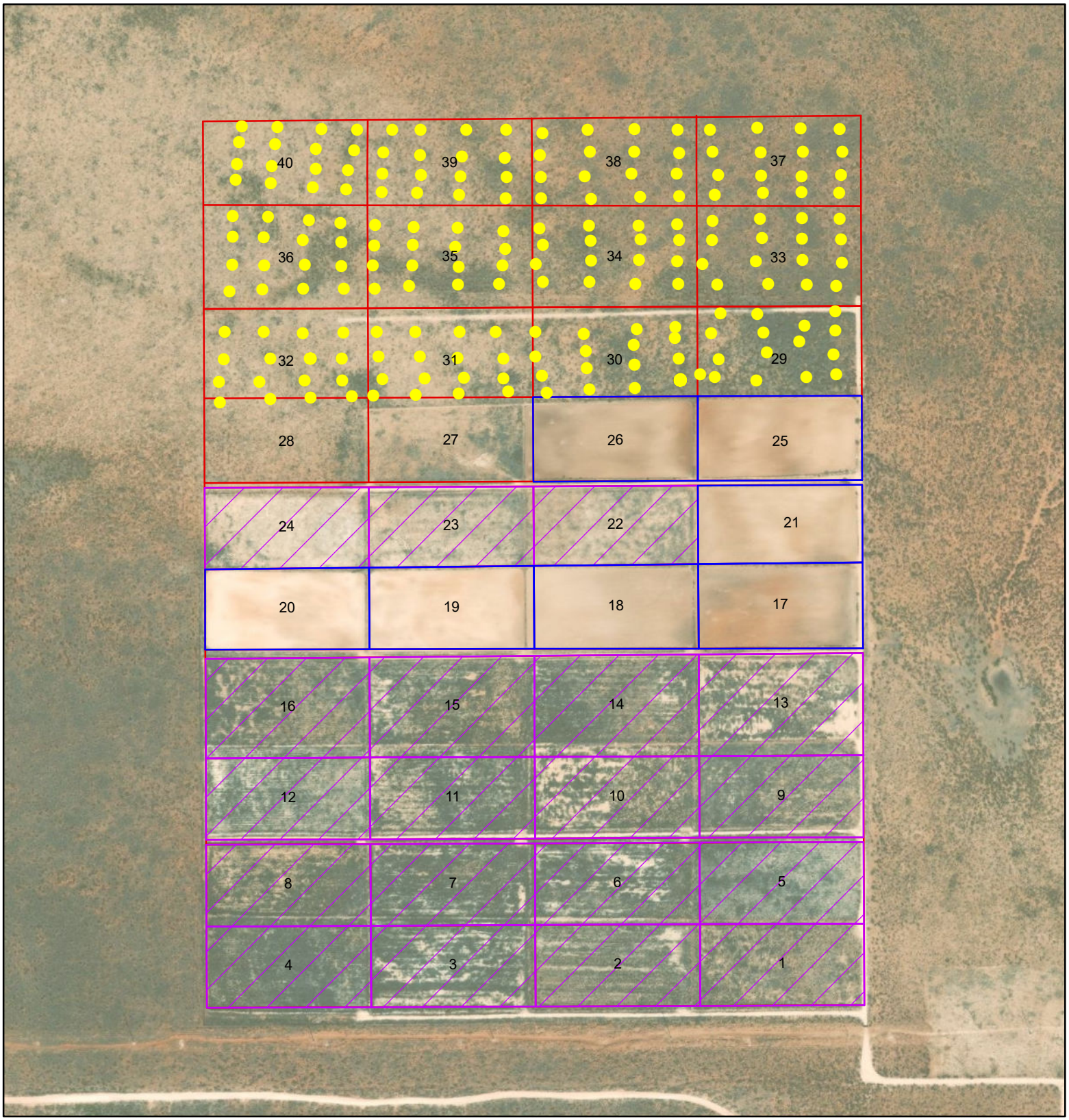
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
JAL LANDFARM NM-02-0012
LEA COUNTY, NEW MEXICO

BACKGROUND SAMPLING REPORT

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1



LEGEND

- Background sample location (March 2021)
- Active Landfarm Cell
- Inactive Landfarm Cell
- Developed Cell - Inactive

0 300 600

SCALE IN FEET

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
JAL LANDFARM NM-02-0012
LEA COUNTY, NEW MEXICO

BACKGROUND SAMPLING REPORT

BACKGROUND SAMPLING LOCATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2

PATH: T:_ENV\CHEVRON_JAL-LANDFARM\GIS\MXD\2021-08\FIG_2_BACKGROUND_SAMPLING_REPORT.MXD SAVED: 8/17/2021 BY: KKELLEY

Appendix A

Analytical Lab Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2471

Laboratory Job ID: 560-92998-1
Client Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021
Revision: 1

For:
ARCADIS U.S., Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Attn: Alison Schaffer

Authorized for release by:
5/25/2021 3:49:59 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

LCMS

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Job ID: 560-92998-1

Laboratory: Eurofins Xenco, Corpus Christi

Narrative

Job Narrative
560-92998-1

Comments
The report was revised on 05/25/21 to include the QC for method 8270.

Receipt
The samples were received on 3/4/2021 11:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.0º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch preparation batch 280-529214 and analytical batch 280-530114 recovered above the upper control limit for Benzidine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: Cell 30-BG-S-3-4-210302 (560-92998-1), Cell 29-BG-S-3-4-210302 (560-92998-2), Cell 31-BG-S-3-4-210303 (560-92998-3), Cell 32-BG-S-3-4-210303 (560-92998-4) and (CCV 280-530114/5).

Method 8270D: The LCSD associated with preparation batch 280-529214 and analytical batch 280-530114 recovered below control limits for multiple analytes. The LCS was in control. The associated samples are outside hold time therefore no re-extraction has been scheduled. The following samples are affected. Cell 30-BG-S-3-4-210302 (560-92998-1), Cell 29-BG-S-3-4-210302 (560-92998-2), Cell 31-BG-S-3-4-210303 (560-92998-3) and Cell 32-BG-S-3-4-210303 (560-92998-4)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 8015B: The continuing calibration verification (CCV) associated with batch 240-476195 recovered outside the control limit for o-Terphenyl (Surr). All analytes of interest in the CCV met criteria and all samples met surrogate criteria. After careful evaluation, the data have been reported. The following sample is impacted: (CCV 240-476195/4).

Method 8081A: The continuing calibration verification (CCV) associated with batch 240-476477 recovered above the upper control limit for Dieldrin, Endosulfan I and Endrin. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 240-476477/4).

Method 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 240-476383 and analytical batch 240-476838 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8081A: The laboratory control sample (LCS) for preparation batch 240-476383 and analytical batch 240-476838 recovered outside control limits for the following analyte: Endosulfan sulfate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

RAD
Methods 901.1, GA-01-R: Gamma Prep Batch 160-501605

Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often,

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Job ID: 560-92998-1 (Continued)

Laboratory: Eurofins Xenco, Corpus Christi (Continued)

such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from	Reported to Analyte
Th-234	Pa-234
Th-234	U-238
Pb-210	Po-210
Pb-210	Bi-210
Cs-137	Ba-137m
Pb-212	Po-216
Xe-131m	Xe-131
Sb-125	Te-125m
Ag-108m	Ag-108
Rh-106	Ru-106
Pb-212	Th-228
Pb-212	Ra-224
U-235	Th-231
Ac-228	Th-232
Ac-228	Ra-228
Th-227	Ra-223
Th-227	Ac-227
Th-227	Bi-211
Th-227	Pb-211
Bi-214	Ra-226

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

Cell 30-BG-S-3-4-210302 (560-92998-1), Cell 29-BG-S-3-4-210302 (560-92998-2), Cell 31-BG-S-3-4-210303 (560-92998-3), Cell 32-BG-S-3-4-210303 (560-92998-4), (LCS 160-501605/2-A), (MB 160-501605/1-A), (280-146030-A-1-B) and (280-146030-A-1-C DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6020: preparation batch 160-502509 and analytical batch 160-502781 The following samples were diluted due to the abundance of salts: Cell 30-BG-S-3-4-210302 (560-92998-1), Cell 29-BG-S-3-4-210302 (560-92998-2), Cell 31-BG-S-3-4-210303 (560-92998-3) and Cell 32-BG-S-3-4-210303 (560-92998-4). Elevated reporting limits (RLs) are provided.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-502509 and analytical batch 160-502781 were outside control limits for barium, iron, and antimony. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.(560-92998-L-1-B MS ^20) and (560-92998-L-1-C MSD ^20)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method 9045D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Cell 30-BG-S-3-4-210302 (560-92998-1), Cell 29-BG-S-3-4-210302 (560-92998-2), Cell 31-BG-S-3-4-210303 (560-92998-3) and Cell 32-BG-S-3-4-210303 (560-92998-4).

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Job ID: 560-92998-1 (Continued)

Laboratory: Eurofins Xenco, Corpus Christi (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 6860: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: The samples arrived in clear glass containers but the SOP requires amber glass containers.

Cell 30-BG-S-3-4-210302 (560-92998-1), Cell 29-BG-S-3-4-210302 (560-92998-2), Cell 31-BG-S-3-4-210303 (560-92998-3), Cell 32-BG-S-3-4-210303 (560-92998-4), (560-92998-F-1 MS) and (560-92998-F-1 MSD)

6860

preparation batch 280-528801

Methods Increment, prep: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: As requested in the method comments, the ISM subsampling portion of the ISM prep process was not performed on Cell 30-BG-S-3-4-210302 (560-92998-1), Cell 29-BG-S-3-4-210302 (560-92998-2), Cell 31-BG-S-3-4-210303 (560-92998-3), Cell 32-BG-S-3-4-210303 (560-92998-4), (560-92998-F-4 MS) and (560-92998-F-4 MSD) in preparation batch 280-528815 by ISM_DD_SI_SS for 8330B_Sonc_10g / 8330B.

Methods Increment, prep: The following samples were air dried and sieved per the procedure; however, the samples contained material that would not pass through the sieve: Cell 30-BG-S-3-4-210302 (560-92998-1), Cell 29-BG-S-3-4-210302 (560-92998-2), Cell 31-BG-S-3-4-210303 (560-92998-3) and Cell 32-BG-S-3-4-210303 (560-92998-4). This material was removed and not extracted. The non-soil material is described in the aliquot worksheet. In preparation batch 280-528815 by ISM_DD_SI_SS for 8330P_Sonc_10g/8330B.

Method 3550C: Samples were prepped from plastic storage containers: Cell 30-BG-S-3-4-210302 (560-92998-1), Cell 29-BG-S-3-4-210302 (560-92998-2), Cell 31-BG-S-3-4-210303 (560-92998-3) and Cell 32-BG-S-3-4-210303 (560-92998-4)Prep Method:3550C/8270D preparation batch 280-529214

Method 3546: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: Cell 30-BG-S-3-4-210302 (560-92998-1), Cell 29-BG-S-3-4-210302 (560-92998-2), Cell 31-BG-S-3-4-210303 (560-92998-3), Cell 32-BG-S-3-4-210303 (560-92998-4), (560-92998-A-1 MS) and (560-92998-A-1 MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302 Lab Sample ID: 560-92998-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di (2-ethylhexyl)phthalate	0.169	J	0.314	0.0438	mg/Kg	1		8270D	Total/NA
Perchlorate	0.223	J	0.492	0.0811	ug/Kg	1		6860	Total/NA
Barium	280		18.7	4.69	mg/Kg	20		6020	Total/NA
Iron	2670		112	56.2	mg/Kg	20		6020	Total/NA
Manganese	31.9		4.69	1.87	mg/Kg	20		6020	Total/NA
Lead	1.98	J	2.81	1.17	mg/Kg	20		6020	Total/NA
Uranium	0.414	J	0.937	0.375	mg/Kg	20		6020	Total/NA
Mercury	0.0143	J b	0.0321	0.0107	mg/Kg	1		7471A	Total/NA
pH	8.0	HF	0.1	0.1	SU	1		9045D	Total/NA
Chloride	29.3		9.93	4.90	mg/Kg	1		9056A	Soluble
Fluoride	5.58		0.497	0.332	mg/Kg	1		9056A	Soluble
Nitrate as N	1.56	J	4.97	1.40	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	1.56	J	4.97	0.274	mg/Kg	1		9056A	Soluble
Sulfate	158		9.93	3.86	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	160		20.0	20.0	mg/L	1		SM 2540C	7 Day Leach

Client Sample ID: Cell 29-BG-S-3-4-210302 Lab Sample ID: 560-92998-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di (2-ethylhexyl)phthalate	0.203	J	0.320	0.0447	mg/Kg	1		8270D	Total/NA
Barium	368		18.6	4.65	mg/Kg	20		6020	Total/NA
Iron	2570		111	55.7	mg/Kg	20		6020	Total/NA
Manganese	23.5		4.65	1.86	mg/Kg	20		6020	Total/NA
Lead	1.82	J	2.79	1.16	mg/Kg	20		6020	Total/NA
Uranium	0.466	J	0.929	0.372	mg/Kg	20		6020	Total/NA
Mercury	0.0153	J b	0.0322	0.0107	mg/Kg	1		7471A	Total/NA
pH	8.1	HF	0.1	0.1	SU	1		9045D	Total/NA
Chloride	6.11	J	9.79	4.83	mg/Kg	1		9056A	Soluble
Nitrite as N	2.34	J	4.90	0.849	mg/Kg	1		9056A	Soluble
Fluoride	3.21		0.490	0.327	mg/Kg	1		9056A	Soluble
Nitrate as N	2.05	J	4.90	1.38	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	4.39	J	4.90	0.270	mg/Kg	1		9056A	Soluble
Sulfate	28.1		9.79	3.81	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	171		14.3	14.3	mg/L	1		SM 2540C	7 Day Leach

Client Sample ID: Cell 31-BG-S-3-4-210303 Lab Sample ID: 560-92998-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	291		19.3	4.82	mg/Kg	20		6020	Total/NA
Iron	2500		116	57.9	mg/Kg	20		6020	Total/NA
Manganese	34.9		4.82	1.93	mg/Kg	20		6020	Total/NA
Lead	1.93	J	2.89	1.21	mg/Kg	20		6020	Total/NA
Uranium	0.457	J	0.965	0.386	mg/Kg	20		6020	Total/NA
Mercury	0.0175	J b	0.0294	0.00979	mg/Kg	1		7471A	Total/NA
pH	8.4	HF	0.1	0.1	SU	1		9045D	Total/NA
Phenols, Total	2.20		1.00	0.338	mg/Kg	1		9065	Total/NA
Chloride	6.79	J	9.93	4.90	mg/Kg	1		9056A	Soluble
Nitrite as N	1.15	J	4.97	0.861	mg/Kg	1		9056A	Soluble
Fluoride	7.52		0.497	0.332	mg/Kg	1		9056A	Soluble
Nitrate as N	1.77	J	4.97	1.40	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	2.92	J	4.97	0.274	mg/Kg	1		9056A	Soluble
Sulfate	65.3		9.93	3.86	mg/Kg	1		9056A	Soluble

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Corpus Christi

Detection Summary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303 (Continued) Lab Sample ID: 560-92998-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	132		10.0	10.0	mg/L	1		SM 2540C	7 Day Leach

Client Sample ID: Cell 32-BG-S-3-4-210303 Lab Sample ID: 560-92998-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perchlorate	0.107	J	0.471	0.0776	ug/Kg	1		6860	Total/NA
Arsenic	3.95	J	9.39	3.76	mg/Kg	20		6020	Total/NA
Barium	266		18.8	4.70	mg/Kg	20		6020	Total/NA
Iron	1970		113	56.3	mg/Kg	20		6020	Total/NA
Manganese	24.2		4.70	1.88	mg/Kg	20		6020	Total/NA
Lead	1.30	J	2.82	1.17	mg/Kg	20		6020	Total/NA
Uranium	0.428	J	0.939	0.376	mg/Kg	20		6020	Total/NA
Mercury	0.0178	J b	0.0309	0.0103	mg/Kg	1		7471A	Total/NA
pH	8.3	HF	0.1	0.1	SU	1		9045D	Total/NA
Chloride	25.8		9.84	4.85	mg/Kg	1		9056A	Soluble
Fluoride	8.30		0.492	0.329	mg/Kg	1		9056A	Soluble
Nitrate as N	4.26	J	4.92	1.38	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	4.26	J	4.92	0.272	mg/Kg	1		9056A	Soluble
Sulfate	125		9.84	3.83	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	164		10.0	10.0	mg/L	1		SM 2540C	7 Day Leach

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Corpus Christi

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302 Lab Sample ID: 560-92998-1

Date Collected: 03/02/21 15:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.729	U	4.99	0.729	ug/Kg			03/06/21 18:08	1
Chloromethane	1.20	U	4.99	1.20	ug/Kg			03/06/21 18:08	1
Vinyl chloride	0.599	U	4.99	0.599	ug/Kg			03/06/21 18:08	1
Bromomethane	1.10	U	4.99	1.10	ug/Kg			03/06/21 18:08	1
Trichlorofluoromethane	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
Acrolein	8.58	U	49.9	8.58	ug/Kg			03/06/21 18:08	1
1,1-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
trans-1,2-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
Methyl tert-butyl ether	0.609	U	4.99	0.609	ug/Kg			03/06/21 18:08	1
1,3-Dichlorobenzene	0.309	U	4.99	0.309	ug/Kg			03/06/21 18:08	1
Methylene Chloride	4.99	U	25.0	4.99	ug/Kg			03/06/21 18:08	1
Acrylonitrile	3.59	U	49.9	3.59	ug/Kg			03/06/21 18:08	1
cis-1,2-Dichloroethene	0.569	U	4.99	0.569	ug/Kg			03/06/21 18:08	1
Carbon tetrachloride	0.509	U	4.99	0.509	ug/Kg			03/06/21 18:08	1
Benzene	0.629	U	4.99	0.629	ug/Kg			03/06/21 18:08	1
1,2-Dichloroethane	0.519	U	4.99	0.519	ug/Kg			03/06/21 18:08	1
Trichloroethene	0.279	U	4.99	0.279	ug/Kg			03/06/21 18:08	1
1,1,1-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
1,1-Dichloroethane	0.589	U	4.99	0.589	ug/Kg			03/06/21 18:08	1
1,2-Dichloropropane	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
1,4-Dioxane	19.0	U	99.8	19.0	ug/Kg			03/06/21 18:08	1
Chloroform	0.868	U	4.99	0.868	ug/Kg			03/06/21 18:08	1
Bromodichloromethane	0.200	U	4.99	0.200	ug/Kg			03/06/21 18:08	1
1,1-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/06/21 18:08	1
cis-1,3-Dichloropropene	0.449	U	4.99	0.449	ug/Kg			03/06/21 18:08	1
Toluene	0.898	U	4.99	0.898	ug/Kg			03/06/21 18:08	1
trans-1,3-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/06/21 18:08	1
1,1,2-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
Tetrachloroethene	0.739	U	4.99	0.739	ug/Kg			03/06/21 18:08	1
1,3-Dichloropropene, Total	0.519	U	4.99	0.519	ug/Kg			03/06/21 18:08	1
1,2-Dibromoethane	0.299	U	4.99	0.299	ug/Kg			03/06/21 18:08	1
Monochlorobenzene	0.299	U	4.99	0.299	ug/Kg			03/06/21 18:08	1
Ethylbenzene	0.449	U	4.99	0.449	ug/Kg			03/06/21 18:08	1
Xylenes, Total	0.499	U	9.98	0.499	ug/Kg			03/06/21 18:08	1
Styrene	0.299	U	4.99	0.299	ug/Kg			03/06/21 18:08	1
Tribromomethane	0.509	U	4.99	0.509	ug/Kg			03/06/21 18:08	1
1,1,2,2-Tetrachloroethane	0.379	U	4.99	0.379	ug/Kg			03/06/21 18:08	1
1,4-Dichlorobenzene	0.319	U	4.99	0.319	ug/Kg			03/06/21 18:08	1
1,2-Dichlorobenzene	0.250	U	4.99	0.250	ug/Kg			03/06/21 18:08	1
1,2,4-Trichlorobenzene	0.968	U	4.99	0.968	ug/Kg			03/06/21 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*65 - 152*		*03/06/21 18:08*	*1*
Toluene-d8 (Surr)	*99*		*65 - 139*		*03/06/21 18:08*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.3	11.9	ug/Kg		03/16/21 09:20	03/17/21 18:17	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302 Lab Sample ID: 560-92998-1

Date Collected: 03/02/21 15:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	88		30 - 164	03/16/21 09:20	03/17/21 18:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00981	U	0.314	0.00981	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Acenaphthylene	0.0782	U	0.314	0.0782	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Anthracene	0.0162	U	0.314	0.0162	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzidine	0.943	U	3.14	0.943	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzo[a]anthracene	0.0190	U	0.314	0.0190	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzo[b]fluoranthene	0.0250	U	0.314	0.0250	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzo[k]fluoranthene	0.0381	U	0.314	0.0381	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzo[g,h,i]perylene	0.0152	U	0.314	0.0152	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzo[a]pyrene	0.0190	U	0.314	0.0190	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Bis(2-chloroethyl)ether	0.0158	U *	0.314	0.0158	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Di (2-ethylhexyl)phthalate	**0.169**	**J**	0.314	0.0438	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Chrysene	0.0257	U	0.314	0.0257	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dibenz(a,h)anthracene	0.0181	U	0.314	0.0181	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dichlorobenzidine, 3,3'-	0.0857	U	0.629	0.0857	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Diethyl phthalate	0.0248	U	0.629	0.0248	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dimethyl phthalate	0.0219	U	0.314	0.0219	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dibutylphthalate	0.0276	U	0.314	0.0276	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
2,4-Dinitrotoluene	0.0629	U	0.314	0.0629	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
2,6-Dinitrotoluene	0.0267	U	0.314	0.0267	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0210	U	0.314	0.0210	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Fluoranthene	0.0343	U	0.314	0.0343	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Fluorene	0.0171	U	0.314	0.0171	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Hexachlorobenzene	0.0276	U	0.314	0.0276	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Hexachlorobutadiene	0.00952	U *	0.314	0.00952	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Hexachlorocyclopentadiene	0.106	U	1.52	0.106	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Hexachloroethane	0.0203	U *	0.314	0.0203	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Indeno[1,2,3-cd]pyrene	0.0210	U	0.314	0.0210	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Isophorone	0.0162	U *	0.314	0.0162	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
1-Methylnaphthalene	0.0107	U	0.314	0.0107	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
2-Methylnaphthalene	0.0181	U *	0.314	0.0181	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Naphthalene	0.0295	U *	0.314	0.0295	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Nitrobenzene	0.0210	U	0.314	0.0210	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
N-Nitrosodi-n-butylamine	0.0921	U	0.314	0.0921	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
N-Nitrosodiethylamine	0.0619	U	0.314	0.0619	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
N-Nitrosodimethylamine	0.0352	U *	0.314	0.0352	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
N-Nitrosodiphenylamine	0.0200	U	0.314	0.0200	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
N-Nitrosopyrrolidine	0.0610	U	0.314	0.0610	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Pentachlorobenzene	0.0619	U	0.314	0.0619	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Phenanthrene	0.0162	U	0.314	0.0162	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Pyrene	0.0115	U	0.314	0.0115	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
1,2,4,5-Tetrachlorobenzene	0.0467	U *	0.314	0.0467	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
2,4-Dichlorophenol	0.00952	U *	0.314	0.00952	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dinitrophenols	0.317	U	1.52	0.317	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dinitro-o-cresol	0.314	U	1.52	0.314	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Pentachlorophenol	0.314	U	1.52	0.314	mg/Kg		03/16/21 15:25	03/24/21 03:22	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302 Lab Sample ID: 560-92998-1

Date Collected: 03/02/21 15:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.00952	U	0.314	0.00952	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
2,4,5-Trichlorophenol	0.00952	U	0.314	0.00952	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Atrazine	0.0352	U	0.314	0.0352	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
bis (2-chloroisopropyl) ether	0.0219	U	0.314	0.0219	mg/Kg		03/16/21 15:25	03/24/21 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*52*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*
2-Fluorobiphenyl	*55*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*
Terphenyl-d14	*72*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*
Phenol-d5 (Surr)	*55*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*
2-Fluorophenol	*53*		*43 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*
2,4,6-Tribromophenol	*57*		*35 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0639	U	0.0996	0.0639	mg/Kg		03/11/21 09:04	03/11/21 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*20 - 140*	*03/11/21 09:04*	*03/11/21 13:17*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.7	U	50.2	34.7	mg/Kg		03/09/21 09:20	03/10/21 10:19	1
C28-C36	34.7	U	50.2	34.7	mg/Kg		03/09/21 09:20	03/10/21 10:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*40*		*39 - 120*	*03/09/21 09:20*	*03/10/21 10:19*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.894	U	4.91	0.894	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Hexachlorocyclohexane, gamma-	1.76	U	4.91	1.76	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Hexachlorocyclohexane, beta-	1.70	U	4.91	1.70	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Hexachlorocyclohexane, delta-	1.66	U	4.91	1.66	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Heptachlor	1.55	U	4.91	1.55	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Aldrin	0.756	U	4.91	0.756	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Heptachlor epoxide	1.41	U	4.91	1.41	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Endosulfan I	1.18	U	4.91	1.18	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Dieldrin	1.08	U	4.91	1.08	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Endrin	1.87	U	4.91	1.87	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Endosulfan II	1.45	U	4.91	1.45	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
DDT	1.11	U	4.91	1.11	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Endrin aldehyde	1.29	U	4.91	1.29	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Endosulfan sulfate	1.26	U	4.91	1.26	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Chlordane (technical)	11.8	U	49.1	11.8	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Toxaphene	24.6	U	98.2	24.6	ug/Kg		03/09/21 08:55	03/12/21 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*30 - 120*	*03/09/21 08:55*	*03/12/21 22:23*	*1*
DCB Decachlorobiphenyl	*78*		*13 - 135*	*03/09/21 08:55*	*03/12/21 22:23*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302 Lab Sample ID: 560-92998-1

Date Collected: 03/02/21 15:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1221	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1232	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1242	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1248	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1254	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1260	0.0104	U	0.0344	0.0104	mg/Kg		03/19/21 07:31	03/19/21 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*32 - 132*	*03/19/21 07:31*	*03/19/21 16:23*	*1*
DCB Decachlorobiphenyl	*69*		*57 - 138*	*03/19/21 07:31*	*03/19/21 16:23*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0217	U	0.0956	0.0217	mg/Kg		03/16/21 15:34	03/18/21 06:01	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0411	U	0.191	0.0411	mg/Kg		03/16/21 15:34	03/18/21 06:01	1
2,4,6-Trinitrotoluene	0.0293	U	0.0956	0.0293	mg/Kg		03/16/21 15:34	03/18/21 06:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 06:01*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.223**	**J**	0.492	0.0811	ug/Kg		03/11/21 12:20	03/12/21 20:04	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.213	U	0.742	0.213	ug/Kg		03/16/21 13:05	04/01/21 11:43	1
Perfluorohexanesulfonic acid (PFHxS)	0.260	U	0.742	0.260	ug/Kg		03/16/21 13:05	04/01/21 11:43	1
Perfluorooctanesulfonic acid (PFOS)	0.130	U	0.742	0.130	ug/Kg		03/16/21 13:05	04/01/21 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 11:43*	*1*
13C8 PFOS	*100*		*70 - 130*	*03/16/21 13:05*	*04/01/21 11:43*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.703	U	1.87	0.703	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Arsenic	3.75	U	9.37	3.75	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Barium	**280**		18.7	4.69	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Beryllium	0.375	U	0.937	0.375	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Cadmium	0.225	U	0.469	0.225	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Chromium	4.22	U	9.37	4.22	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Iron	**2670**		112	56.2	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Copper	3.75	U	9.37	3.75	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Manganese	**31.9**		4.69	1.87	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Lead	**1.98**	**J**	2.81	1.17	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Antimony	1.87	U	4.69	1.87	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Selenium	3.00	U	4.69	3.00	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Thallium	1.87	U	4.69	1.87	mg/Kg		03/19/21 09:44	03/22/21 17:42	20

Eurofins Xenco, Corpus Christi

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302 Lab Sample ID: 560-92998-1

Date Collected: 03/02/21 15:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	18.7	U	46.9	18.7	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Uranium	**0.414**	**J**	0.937	0.375	mg/Kg		03/19/21 09:44	03/22/21 17:42	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0143**	**J b**	0.0321	0.0107	mg/Kg		03/24/21 17:26	03/24/21 20:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.164	U	0.431	0.164	mg/Kg		03/11/21 09:04	03/11/21 11:06	1
pH	**8.0**	**HF**	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29.3**		9.93	4.90	mg/Kg			03/22/21 17:57	1
Nitrite as N	0.861	U	4.97	0.861	mg/Kg			03/22/21 17:57	1
Fluoride	**5.58**		0.497	0.332	mg/Kg			03/22/21 17:57	1
Nitrate as N	**1.56**	**J**	4.97	1.40	mg/Kg			03/22/21 17:57	1
Nitrate Nitrite as N	**1.56**	**J**	4.97	0.274	mg/Kg			03/22/21 17:57	1
Sulfate	**158**		9.93	3.86	mg/Kg			03/22/21 17:57	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**160**		20.0	20.0	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.817**		0.177	0.196	1.00	0.138	pCi/g	03/11/21 17:46	04/01/21 10:09	1
Radium-228	0.170	U	0.0933	0.0948		0.377	pCi/g	03/11/21 17:46	04/01/21 10:09	1
Combined Radium 226 + 228	**0.987**		0.200	0.218		0.377	pCi/g	03/11/21 17:46	04/01/21 10:09	1

Client Sample ID: Cell 29-BG-S-3-4-210302 Lab Sample ID: 560-92998-2

Date Collected: 03/02/21 11:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.717	U	4.91	0.717	ug/Kg			03/06/21 18:34	1
Chloromethane	1.18	U	4.91	1.18	ug/Kg			03/06/21 18:34	1
Vinyl chloride	0.589	U	4.91	0.589	ug/Kg			03/06/21 18:34	1
Bromomethane	1.08	U	4.91	1.08	ug/Kg			03/06/21 18:34	1
Trichlorofluoromethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
Acrolein	8.45	U	49.1	8.45	ug/Kg			03/06/21 18:34	1
1,1-Dichloroethene	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
trans-1,2-Dichloroethene	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
Methyl tert-butyl ether	0.599	U	4.91	0.599	ug/Kg			03/06/21 18:34	1
1,3-Dichlorobenzene	0.305	U	4.91	0.305	ug/Kg			03/06/21 18:34	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 29-BG-S-3-4-210302 **Lab Sample ID: 560-92998-2**
Date Collected: 03/02/21 11:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	4.91	U	24.6	4.91	ug/Kg			03/06/21 18:34	1
Acrylonitrile	3.54	U	49.1	3.54	ug/Kg			03/06/21 18:34	1
cis-1,2-Dichloroethene	0.560	U	4.91	0.560	ug/Kg			03/06/21 18:34	1
Carbon tetrachloride	0.501	U	4.91	0.501	ug/Kg			03/06/21 18:34	1
Benzene	0.619	U	4.91	0.619	ug/Kg			03/06/21 18:34	1
1,2-Dichloroethane	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:34	1
Trichloroethene	0.275	U	4.91	0.275	ug/Kg			03/06/21 18:34	1
1,1,1-Trichloroethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
1,1-Dichloroethane	0.580	U	4.91	0.580	ug/Kg			03/06/21 18:34	1
1,2-Dichloropropane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
1,4-Dioxane	18.7	U	98.2	18.7	ug/Kg			03/06/21 18:34	1
Chloroform	0.855	U	4.91	0.855	ug/Kg			03/06/21 18:34	1
Bromodichloromethane	0.196	U	4.91	0.196	ug/Kg			03/06/21 18:34	1
1,1-Dichloropropene	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:34	1
cis-1,3-Dichloropropene	0.442	U	4.91	0.442	ug/Kg			03/06/21 18:34	1
Toluene	0.884	U	4.91	0.884	ug/Kg			03/06/21 18:34	1
trans-1,3-Dichloropropene	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:34	1
1,1,2-Trichloroethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
Tetrachloroethene	0.727	U	4.91	0.727	ug/Kg			03/06/21 18:34	1
1,3-Dichloropropene, Total	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:34	1
1,2-Dibromoethane	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:34	1
Monochlorobenzene	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:34	1
Ethylbenzene	0.442	U	4.91	0.442	ug/Kg			03/06/21 18:34	1
Xylenes, Total	0.491	U	9.82	0.491	ug/Kg			03/06/21 18:34	1
Styrene	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:34	1
Tribromomethane	0.501	U	4.91	0.501	ug/Kg			03/06/21 18:34	1
1,1,2,2-Tetrachloroethane	0.373	U	4.91	0.373	ug/Kg			03/06/21 18:34	1
1,4-Dichlorobenzene	0.314	U	4.91	0.314	ug/Kg			03/06/21 18:34	1
1,2-Dichlorobenzene	0.246	U	4.91	0.246	ug/Kg			03/06/21 18:34	1
1,2,4-Trichlorobenzene	0.953	U	4.91	0.953	ug/Kg			03/06/21 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*65 - 152*		*03/06/21 18:34*	*1*
Toluene-d8 (Surr)	*98*		*65 - 139*		*03/06/21 18:34*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.8	U	64.8	11.8	ug/Kg		03/16/21 09:20	03/17/21 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*98*		*30 - 164*	*03/16/21 09:20*	*03/17/21 18:42*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0100	U	0.320	0.0100	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Acenaphthylene	0.0797	U	0.320	0.0797	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Anthracene	0.0165	U	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Benzidine	0.961	U	3.20	0.961	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Benzo[a]anthracene	0.0194	U	0.320	0.0194	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Benzo[b]fluoranthene	0.0254	U	0.320	0.0254	mg/Kg		03/16/21 15:25	03/24/21 03:46	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 29-BG-S-3-4-210302 **Lab Sample ID: 560-92998-2**
Date Collected: 03/02/21 11:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.0388	U	0.320	0.0388	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Benzo[g,h,i]perylene	0.0155	U	0.320	0.0155	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Benzo[a]pyrene	0.0194	U	0.320	0.0194	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Bis(2-chloroethyl)ether	0.0161	U *	0.320	0.0161	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Di (2-ethylhexyl)phthalate	**0.203**	**J**	0.320	0.0447	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Chrysene	0.0262	U	0.320	0.0262	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dibenz(a,h)anthracene	0.0184	U	0.320	0.0184	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dichlorobenzidine, 3,3'-	0.0874	U	0.641	0.0874	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Diethyl phthalate	0.0252	U	0.641	0.0252	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dimethyl phthalate	0.0223	U	0.320	0.0223	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dibutylphthalate	0.0282	U	0.320	0.0282	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2,4-Dinitrotoluene	0.0641	U	0.320	0.0641	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2,6-Dinitrotoluene	0.0272	U	0.320	0.0272	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Fluoranthene	0.0350	U	0.320	0.0350	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Fluorene	0.0175	U	0.320	0.0175	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Hexachlorobenzene	0.0282	U	0.320	0.0282	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Hexachlorobutadiene	0.00971	U *	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Hexachlorocyclopentadiene	0.108	U	1.55	0.108	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Hexachloroethane	0.0207	U *	0.320	0.0207	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Indeno[1,2,3-cd]pyrene	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Isophorone	0.0165	U *	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
1-Methylnaphthalene	0.0109	U	0.320	0.0109	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2-Methylnaphthalene	0.0184	U *	0.320	0.0184	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Naphthalene	0.0301	U *	0.320	0.0301	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Nitrobenzene	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
N-Nitrosodi-n-butylamine	0.0939	U	0.320	0.0939	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
N-Nitrosodiethylamine	0.0631	U	0.320	0.0631	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
N-Nitrosodimethylamine	0.0359	U *	0.320	0.0359	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
N-Nitrosodiphenylamine	0.0204	U	0.320	0.0204	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
N-Nitrosopyrrolidine	0.0621	U	0.320	0.0621	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Pentachlorobenzene	0.0631	U	0.320	0.0631	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Phenanthrene	0.0165	U	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Pyrene	0.0117	U	0.320	0.0117	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
1,2,4,5-Tetrachlorobenzene	0.0476	U *	0.320	0.0476	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2,4-Dichlorophenol	0.00971	U *	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dinitrophenols	0.323	U	1.55	0.323	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dinitro-o-cresol	0.320	U	1.55	0.320	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Pentachlorophenol	0.320	U	1.55	0.320	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2,4,6-Trichlorophenol	0.00971	U	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2,4,5-Trichlorophenol	0.00971	U	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Atrazine	0.0359	U	0.320	0.0359	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
bis (2-chloroisopropyl) ether	0.0223	U	0.320	0.0223	mg/Kg		03/16/21 15:25	03/24/21 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*50*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*
2-Fluorobiphenyl	*54*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*
Terphenyl-d14	*70*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*
Phenol-d5 (Surr)	*53*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 29-BG-S-3-4-210302
Lab Sample ID: 560-92998-2
Date Collected: 03/02/21 11:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*50*		*43 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*
2,4,6-Tribromophenol	*57*		*35 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0637	U	0.0992	0.0637	mg/Kg		03/11/21 09:04	03/11/21 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*77*		*20 - 140*	*03/11/21 09:04*	*03/11/21 15:06*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	35.2	U	50.9	35.2	mg/Kg		03/09/21 09:20	03/10/21 10:47	1
C28-C36	35.2	U	50.9	35.2	mg/Kg		03/09/21 09:20	03/10/21 10:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*55*		*39 - 120*	*03/09/21 09:20*	*03/10/21 10:47*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.883	U	4.85	0.883	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Hexachlorocyclohexane, gamma-	1.74	U	4.85	1.74	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Hexachlorocyclohexane, beta-	1.68	U	4.85	1.68	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Hexachlorocyclohexane, delta-	1.64	U	4.85	1.64	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Heptachlor	1.53	U	4.85	1.53	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Aldrin	0.748	U	4.85	0.748	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Heptachlor epoxide	1.40	U	4.85	1.40	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Endosulfan I	1.17	U	4.85	1.17	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Dieldrin	1.07	U	4.85	1.07	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Endrin	1.84	U	4.85	1.84	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Endosulfan II	1.44	U	4.85	1.44	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
DDT	1.10	U	4.85	1.10	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Endrin aldehyde	1.27	U	4.85	1.27	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Endosulfan sulfate	1.24	U *	4.85	1.24	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Chlordane (technical)	11.7	U	48.5	11.7	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Toxaphene	24.3	U	97.1	24.3	ug/Kg		03/11/21 08:26	03/15/21 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*30 - 120*	*03/11/21 08:26*	*03/15/21 19:32*	*1*
DCB Decachlorobiphenyl	*94*		*13 - 135*	*03/11/21 08:26*	*03/15/21 19:32*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1221	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1232	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1242	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1248	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1254	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1260	0.00987	U	0.0326	0.00987	mg/Kg		03/19/21 07:31	03/19/21 17:30	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 29-BG-S-3-4-210302
Date Collected: 03/02/21 11:40
Date Received: 03/04/21 11:40

Lab Sample ID: 560-92998-2
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*73*		*32 - 132*	*03/19/21 07:31*	*03/19/21 17:30*	*1*
DCB Decachlorobiphenyl	*65*		*57 - 138*	*03/19/21 07:31*	*03/19/21 17:30*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0225	U	0.0991	0.0225	mg/Kg		03/16/21 15:34	03/18/21 06:24	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0426	U	0.198	0.0426	mg/Kg		03/16/21 15:34	03/18/21 06:24	1
2,4,6-Trinitrotoluene	0.0304	U	0.0991	0.0304	mg/Kg		03/16/21 15:34	03/18/21 06:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 06:24*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0821	U	0.498	0.0821	ug/Kg		03/11/21 12:20	03/12/21 20:19	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.226	U	0.785	0.226	ug/Kg		03/16/21 13:05	04/01/21 12:09	1
Perfluorohexanesulfonic acid (PFHxS)	0.275	U	0.785	0.275	ug/Kg		03/16/21 13:05	04/01/21 12:09	1
Perfluorooctanesulfonic acid (PFOS)	0.137	U	0.785	0.137	ug/Kg		03/16/21 13:05	04/01/21 12:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	*99*		*57 - 153*	*03/16/21 13:05*	*04/01/21 12:09*	*1*
13C8 PFOS	*103*		*70 - 130*	*03/16/21 13:05*	*04/01/21 12:09*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.697	U	1.86	0.697	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Arsenic	3.72	U	9.29	3.72	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Barium	**368**		18.6	4.65	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Beryllium	0.372	U	0.929	0.372	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Cadmium	0.223	U	0.465	0.223	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Chromium	4.18	U	9.29	4.18	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Iron	**2570**		111	55.7	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Copper	3.72	U	9.29	3.72	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Manganese	**23.5**		4.65	1.86	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Lead	**1.82**	**J**	2.79	1.16	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Antimony	1.86	U	4.65	1.86	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Selenium	2.97	U	4.65	2.97	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Thallium	1.86	U	4.65	1.86	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Zinc	18.6	U	46.5	18.6	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Uranium	**0.466**	**J**	0.929	0.372	mg/Kg		03/19/21 09:44	03/22/21 18:00	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0153**	**J b**	0.0322	0.0107	mg/Kg		03/24/21 17:26	03/24/21 20:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.170	U	0.446	0.170	mg/Kg		03/11/21 09:04	03/11/21 11:01	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 29-BG-S-3-4-210302 Lab Sample ID: 560-92998-2

Date Collected: 03/02/21 11:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1	HF	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.11	J	9.79	4.83	mg/Kg			03/22/21 18:18	1
Nitrite as N	2.34	J	4.90	0.849	mg/Kg			03/22/21 18:18	1
Fluoride	3.21		0.490	0.327	mg/Kg			03/22/21 18:18	1
Nitrate as N	2.05	J	4.90	1.38	mg/Kg			03/22/21 18:18	1
Nitrate Nitrite as N	4.39	J	4.90	0.270	mg/Kg			03/22/21 18:18	1
Sulfate	28.1		9.79	3.81	mg/Kg			03/22/21 18:18	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	171		14.3	14.3	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.171	U	0.103	0.105	1.00	0.308	pCi/g	03/11/21 17:46	04/01/21 10:10	1
Radium-228	0.583		0.170	0.183		0.179	pCi/g	03/11/21 17:46	04/01/21 10:10	1
Combined Radium 226 + 228	0.753		0.199	0.211		0.308	pCi/g	03/11/21 17:46	04/01/21 10:10	1

Client Sample ID: Cell 31-BG-S-3-4-210303 Lab Sample ID: 560-92998-3

Date Collected: 03/03/21 12:15 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.717	U	4.91	0.717	ug/Kg			03/06/21 18:59	1
Chloromethane	1.18	U	4.91	1.18	ug/Kg			03/06/21 18:59	1
Vinyl chloride	0.589	U	4.91	0.589	ug/Kg			03/06/21 18:59	1
Bromomethane	1.08	U	4.91	1.08	ug/Kg			03/06/21 18:59	1
Trichlorofluoromethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1
Acrolein	8.45	U	49.1	8.45	ug/Kg			03/06/21 18:59	1
1,1-Dichloroethene	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1
trans-1,2-Dichloroethene	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1
Methyl tert-butyl ether	0.599	U	4.91	0.599	ug/Kg			03/06/21 18:59	1
1,3-Dichlorobenzene	0.305	U	4.91	0.305	ug/Kg			03/06/21 18:59	1
Methylene Chloride	4.91	U	24.6	4.91	ug/Kg			03/06/21 18:59	1
Acrylonitrile	3.54	U	49.1	3.54	ug/Kg			03/06/21 18:59	1
cis-1,2-Dichloroethene	0.560	U	4.91	0.560	ug/Kg			03/06/21 18:59	1
Carbon tetrachloride	0.501	U	4.91	0.501	ug/Kg			03/06/21 18:59	1
Benzene	0.619	U	4.91	0.619	ug/Kg			03/06/21 18:59	1
1,2-Dichloroethane	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:59	1
Trichloroethene	0.275	U	4.91	0.275	ug/Kg			03/06/21 18:59	1
1,1,1-Trichloroethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1
1,1-Dichloroethane	0.580	U	4.91	0.580	ug/Kg			03/06/21 18:59	1
1,2-Dichloropropane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303 Lab Sample ID: 560-92998-3

Date Collected: 03/03/21 12:15 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	18.7	U	98.2	18.7	ug/Kg			03/06/21 18:59	1
Chloroform	0.855	U	4.91	0.855	ug/Kg			03/06/21 18:59	1
Bromodichloromethane	0.196	U	4.91	0.196	ug/Kg			03/06/21 18:59	1
1,1-Dichloropropene	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:59	1
cis-1,3-Dichloropropene	0.442	U	4.91	0.442	ug/Kg			03/06/21 18:59	1
Toluene	0.884	U	4.91	0.884	ug/Kg			03/06/21 18:59	1
trans-1,3-Dichloropropene	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:59	1
1,1,2-Trichloroethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1
Tetrachloroethene	0.727	U	4.91	0.727	ug/Kg			03/06/21 18:59	1
1,3-Dichloropropene, Total	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:59	1
1,2-Dibromoethane	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:59	1
Monochlorobenzene	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:59	1
Ethylbenzene	0.442	U	4.91	0.442	ug/Kg			03/06/21 18:59	1
Xylenes, Total	0.491	U	9.82	0.491	ug/Kg			03/06/21 18:59	1
Styrene	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:59	1
Tribromomethane	0.501	U	4.91	0.501	ug/Kg			03/06/21 18:59	1
1,1,2,2-Tetrachloroethane	0.373	U	4.91	0.373	ug/Kg			03/06/21 18:59	1
1,4-Dichlorobenzene	0.314	U	4.91	0.314	ug/Kg			03/06/21 18:59	1
1,2-Dichlorobenzene	0.246	U	4.91	0.246	ug/Kg			03/06/21 18:59	1
1,2,4-Trichlorobenzene	0.953	U	4.91	0.953	ug/Kg			03/06/21 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*65 - 152*		*03/06/21 18:59*	*1*
Toluene-d8 (Surr)	*98*		*65 - 139*		*03/06/21 18:59*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	12.0	U	65.8	12.0	ug/Kg		03/16/21 09:20	03/17/21 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*102*		*30 - 164*	*03/16/21 09:20*	*03/17/21 19:07*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0100	U	0.320	0.0100	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Acenaphthylene	0.0797	U	0.320	0.0797	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Anthracene	0.0165	U	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzidine	0.961	U	3.20	0.961	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzo[a]anthracene	0.0194	U	0.320	0.0194	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzo[b]fluoranthene	0.0254	U	0.320	0.0254	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzo[k]fluoranthene	0.0388	U	0.320	0.0388	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzo[g,h,i]perylene	0.0155	U	0.320	0.0155	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzo[a]pyrene	0.0194	U	0.320	0.0194	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Bis(2-chloroethyl)ether	0.0161	U *	0.320	0.0161	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Di (2-ethylhexyl)phthalate	0.0447	U	0.320	0.0447	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Chrysene	0.0262	U	0.320	0.0262	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Dibenz(a,h)anthracene	0.0184	U	0.320	0.0184	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Dichlorobenzidine, 3,3'-	0.0874	U	0.641	0.0874	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Diethyl phthalate	0.0252	U	0.641	0.0252	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Dimethyl phthalate	0.0223	U	0.320	0.0223	mg/Kg		03/16/21 15:25	03/24/21 04:11	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303 Lab Sample ID: 560-92998-3

Date Collected: 03/03/21 12:15 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibutylphthalate	0.0282	U	0.320	0.0282	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2,4-Dinitrotoluene	0.0641	U	0.320	0.0641	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2,6-Dinitrotoluene	0.0272	U	0.320	0.0272	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Fluoranthene	0.0350	U	0.320	0.0350	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Fluorene	0.0175	U	0.320	0.0175	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Hexachlorobenzene	0.0282	U	0.320	0.0282	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Hexachlorobutadiene	0.00971	U *	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Hexachlorocyclopentadiene	0.108	U	1.55	0.108	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Hexachloroethane	0.0207	U *	0.320	0.0207	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Indeno[1,2,3-cd]pyrene	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Isophorone	0.0165	U *	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
1-Methylnaphthalene	0.0109	U	0.320	0.0109	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2-Methylnaphthalene	0.0184	U *	0.320	0.0184	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Naphthalene	0.0301	U *	0.320	0.0301	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Nitrobenzene	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
N-Nitrosodi-n-butylamine	0.0939	U	0.320	0.0939	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
N-Nitrosodiethylamine	0.0631	U	0.320	0.0631	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
N-Nitrosodimethylamine	0.0359	U *	0.320	0.0359	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
N-Nitrosodiphenylamine	0.0204	U	0.320	0.0204	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
N-Nitrosopyrrolidine	0.0621	U	0.320	0.0621	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Pentachlorobenzene	0.0631	U	0.320	0.0631	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Phenanthrene	0.0165	U	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Pyrene	0.0117	U	0.320	0.0117	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
1,2,4,5-Tetrachlorobenzene	0.0476	U *	0.320	0.0476	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2,4-Dichlorophenol	0.00971	U *	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Dinitrophenols	0.323	U	1.55	0.323	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Dinitro-o-cresol	0.320	U	1.55	0.320	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Pentachlorophenol	0.320	U	1.55	0.320	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2,4,6-Trichlorophenol	0.00971	U	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2,4,5-Trichlorophenol	0.00971	U	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Atrazine	0.0359	U	0.320	0.0359	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
bis (2-chloroisopropyl) ether	0.0223	U	0.320	0.0223	mg/Kg		03/16/21 15:25	03/24/21 04:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*50*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*
2-Fluorobiphenyl	*53*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*
Terphenyl-d14	*66*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*
Phenol-d5 (Surr)	*52*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*
2-Fluorophenol	*50*		*43 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*
2,4,6-Tribromophenol	*51*		*35 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0629	U	0.0980	0.0629	mg/Kg		03/11/21 09:04	03/11/21 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*106*		*20 - 140*	*03/11/21 09:04*	*03/11/21 15:43*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303 Lab Sample ID: 560-92998-3

Date Collected: 03/03/21 12:15 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.9	U	49.0	33.9	mg/Kg		03/09/21 09:20	03/10/21 11:14	1
C28-C36	33.9	U	49.0	33.9	mg/Kg		03/09/21 09:20	03/10/21 11:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*75*		*39 - 120*	*03/09/21 09:20*	*03/10/21 11:14*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.920	U	5.06	0.920	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Hexachlorocyclohexane, gamma-	1.81	U	5.06	1.81	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Hexachlorocyclohexane, beta-	1.75	U	5.06	1.75	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Hexachlorocyclohexane, delta-	1.71	U	5.06	1.71	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Heptachlor	1.60	U	5.06	1.60	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Aldrin	0.779	U	5.06	0.779	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Heptachlor epoxide	1.46	U	5.06	1.46	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Endosulfan I	1.21	U	5.06	1.21	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Dieldrin	1.11	U	5.06	1.11	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Endrin	1.92	U	5.06	1.92	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Endosulfan II	1.50	U	5.06	1.50	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
DDT	1.14	U	5.06	1.14	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Endrin aldehyde	1.32	U	5.06	1.32	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Endosulfan sulfate	1.29	U *	5.06	1.29	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Chlordane (technical)	12.1	U	50.6	12.1	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Toxaphene	25.3	U	101	25.3	ug/Kg		03/11/21 08:26	03/15/21 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 120*	*03/11/21 08:26*	*03/15/21 19:45*	*1*
DCB Decachlorobiphenyl	*86*		*13 - 135*	*03/11/21 08:26*	*03/15/21 19:45*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1221	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1232	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1242	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1248	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1254	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1260	0.00989	U	0.0326	0.00989	mg/Kg		03/19/21 07:31	03/19/21 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*32 - 132*	*03/19/21 07:31*	*03/19/21 17:53*	*1*
DCB Decachlorobiphenyl	*81*		*57 - 138*	*03/19/21 07:31*	*03/19/21 17:53*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0225	U	0.0990	0.0225	mg/Kg		03/16/21 15:34	03/18/21 06:47	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0426	U	0.198	0.0426	mg/Kg		03/16/21 15:34	03/18/21 06:47	1
2,4,6-Trinitrotoluene	0.0304	U	0.0990	0.0304	mg/Kg		03/16/21 15:34	03/18/21 06:47	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303
Date Collected: 03/03/21 12:15
Date Received: 03/04/21 11:40

Lab Sample ID: 560-92998-3
Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*		*83 - 122*	*03/16/21 15:34*	*03/18/21 06:47*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0800	U	0.485	0.0800	ug/Kg		03/11/21 12:20	03/12/21 20:24	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.218	U	0.759	0.218	ug/Kg		03/16/21 13:05	04/01/21 12:18	1
Perfluorohexanesulfonic acid (PFHxS)	0.266	U	0.759	0.266	ug/Kg		03/16/21 13:05	04/01/21 12:18	1
Perfluorooctanesulfonic acid (PFOS)	0.133	U	0.759	0.133	ug/Kg		03/16/21 13:05	04/01/21 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*99*		*57 - 153*	*03/16/21 13:05*	*04/01/21 12:18*	*1*
13C8 PFOS	*104*		*70 - 130*	*03/16/21 13:05*	*04/01/21 12:18*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.723	U	1.93	0.723	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Arsenic	3.86	U	9.65	3.86	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Barium	**291**		19.3	4.82	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Beryllium	0.386	U	0.965	0.386	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Cadmium	0.231	U	0.482	0.231	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Chromium	4.34	U	9.65	4.34	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Iron	**2500**		116	57.9	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Copper	3.86	U	9.65	3.86	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Manganese	**34.9**		4.82	1.93	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Lead	**1.93**	**J**	2.89	1.21	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Antimony	1.93	U	4.82	1.93	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Selenium	3.09	U	4.82	3.09	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Thallium	1.93	U	4.82	1.93	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Zinc	19.3	U	48.2	19.3	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Uranium	**0.457**	**J**	0.965	0.386	mg/Kg		03/19/21 09:44	03/22/21 18:13	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0175**	**J b**	0.0294	0.00979	mg/Kg		03/24/21 17:26	03/24/21 20:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.198	U	0.521	0.198	mg/Kg		03/11/21 09:04	03/11/21 11:08	1
pH	**8.4**	**HF**	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	**2.20**		1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.79**	**J**	9.93	4.90	mg/Kg			03/22/21 18:40	1
Nitrite as N	**1.15**	**J**	4.97	0.861	mg/Kg			03/22/21 18:40	1
Fluoride	**7.52**		0.497	0.332	mg/Kg			03/22/21 18:40	1
Nitrate as N	**1.77**	**J**	4.97	1.40	mg/Kg			03/22/21 18:40	1
Nitrate Nitrite as N	**2.92**	**J**	4.97	0.274	mg/Kg			03/22/21 18:40	1
Sulfate	**65.3**		9.93	3.86	mg/Kg			03/22/21 18:40	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303 Lab Sample ID: 560-92998-3

Date Collected: 03/03/21 12:15 **Matrix: Solid**
Date Received: 03/04/21 11:40

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	132		10.0	10.0	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.788		0.136	0.159	1.00	0.0433	pCi/g	03/11/21 17:46	04/01/21 10:14	1
Radium-228	0.0506	U	0.273	0.273		0.316	pCi/g	03/11/21 17:46	04/01/21 10:14	1
Combined Radium 226 + 228	0.838		0.305	0.316		0.316	pCi/g	03/11/21 17:46	04/01/21 10:14	1

Client Sample ID: Cell 32-BG-S-3-4-210303 Lab Sample ID: 560-92998-4

Date Collected: 03/03/21 14:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.815	U	5.58	0.815	ug/Kg			03/06/21 19:25	1
Chloromethane	1.34	U	5.58	1.34	ug/Kg			03/06/21 19:25	1
Vinyl chloride	0.670	U	5.58	0.670	ug/Kg			03/06/21 19:25	1
Bromomethane	1.23	U	5.58	1.23	ug/Kg			03/06/21 19:25	1
Trichlorofluoromethane	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
Acrolein	9.60	U	55.8	9.60	ug/Kg			03/06/21 19:25	1
1,1-Dichloroethene	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
trans-1,2-Dichloroethene	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
Methyl tert-butyl ether	0.681	U	5.58	0.681	ug/Kg			03/06/21 19:25	1
1,3-Dichlorobenzene	0.346	U	5.58	0.346	ug/Kg			03/06/21 19:25	1
Methylene Chloride	5.58	U	27.9	5.58	ug/Kg			03/06/21 19:25	1
Acrylonitrile	4.02	U	55.8	4.02	ug/Kg			03/06/21 19:25	1
cis-1,2-Dichloroethene	0.636	U	5.58	0.636	ug/Kg			03/06/21 19:25	1
Carbon tetrachloride	0.569	U	5.58	0.569	ug/Kg			03/06/21 19:25	1
Benzene	0.703	U	5.58	0.703	ug/Kg			03/06/21 19:25	1
1,2-Dichloroethane	0.580	U	5.58	0.580	ug/Kg			03/06/21 19:25	1
Trichloroethene	0.313	U	5.58	0.313	ug/Kg			03/06/21 19:25	1
1,1,1-Trichloroethane	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
1,1-Dichloroethane	0.658	U	5.58	0.658	ug/Kg			03/06/21 19:25	1
1,2-Dichloropropane	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
1,4-Dioxane	21.2	U	112	21.2	ug/Kg			03/06/21 19:25	1
Chloroform	0.971	U	5.58	0.971	ug/Kg			03/06/21 19:25	1
Bromodichloromethane	0.223	U	5.58	0.223	ug/Kg			03/06/21 19:25	1
1,1-Dichloropropene	0.580	U	5.58	0.580	ug/Kg			03/06/21 19:25	1
cis-1,3-Dichloropropene	0.502	U	5.58	0.502	ug/Kg			03/06/21 19:25	1
Toluene	1.00	U	5.58	1.00	ug/Kg			03/06/21 19:25	1
trans-1,3-Dichloropropene	0.580	U	5.58	0.580	ug/Kg			03/06/21 19:25	1
1,1,2-Trichloroethane	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
Tetrachloroethene	0.826	U	5.58	0.826	ug/Kg			03/06/21 19:25	1
1,3-Dichloropropene, Total	0.580	U	5.58	0.580	ug/Kg			03/06/21 19:25	1
1,2-Dibromoethane	0.335	U	5.58	0.335	ug/Kg			03/06/21 19:25	1
Monochlorobenzene	0.335	U	5.58	0.335	ug/Kg			03/06/21 19:25	1
Ethylbenzene	0.502	U	5.58	0.502	ug/Kg			03/06/21 19:25	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 32-BG-S-3-4-210303
Lab Sample ID: 560-92998-4
Date Collected: 03/03/21 14:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.558	U	11.2	0.558	ug/Kg			03/06/21 19:25	1
Styrene	0.335	U	5.58	0.335	ug/Kg			03/06/21 19:25	1
Tribromomethane	0.569	U	5.58	0.569	ug/Kg			03/06/21 19:25	1
1,1,2,2-Tetrachloroethane	0.424	U	5.58	0.424	ug/Kg			03/06/21 19:25	1
1,4-Dichlorobenzene	0.357	U	5.58	0.357	ug/Kg			03/06/21 19:25	1
1,2-Dichlorobenzene	0.279	U	5.58	0.279	ug/Kg			03/06/21 19:25	1
1,2,4-Trichlorobenzene	1.08	U	5.58	1.08	ug/Kg			03/06/21 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*65 - 152*		*03/06/21 19:25*	*1*
Toluene-d8 (Surr)	*97*		*65 - 139*		*03/06/21 19:25*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.7	11.9	ug/Kg		03/16/21 09:20	03/17/21 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*99*		*30 - 164*	*03/16/21 09:20*	*03/17/21 19:32*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00942	U	0.302	0.00942	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Acenaphthylene	0.0751	U	0.302	0.0751	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Anthracene	0.0155	U	0.302	0.0155	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzidine	0.905	U	3.02	0.905	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzo[a]anthracene	0.0183	U	0.302	0.0183	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzo[b]fluoranthene	0.0240	U	0.302	0.0240	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzo[k]fluoranthene	0.0366	U	0.302	0.0366	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzo[g,h,i]perylene	0.0146	U	0.302	0.0146	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzo[a]pyrene	0.0183	U	0.302	0.0183	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Bis(2-chloroethyl)ether	0.0152	U *	0.302	0.0152	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Di (2-ethylhexyl)phthalate	0.0421	U	0.302	0.0421	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Chrysene	0.0247	U	0.302	0.0247	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dibenz(a,h)anthracene	0.0174	U	0.302	0.0174	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dichlorobenzidine, 3,3'-	0.0823	U	0.604	0.0823	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Diethyl phthalate	0.0238	U	0.604	0.0238	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dimethyl phthalate	0.0210	U	0.302	0.0210	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dibutylphthalate	0.0265	U	0.302	0.0265	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
2,4-Dinitrotoluene	0.0604	U	0.302	0.0604	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
2,6-Dinitrotoluene	0.0256	U	0.302	0.0256	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0201	U	0.302	0.0201	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Fluoranthene	0.0329	U	0.302	0.0329	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Fluorene	0.0165	U	0.302	0.0165	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Hexachlorobenzene	0.0265	U	0.302	0.0265	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Hexachlorobutadiene	0.00915	U *	0.302	0.00915	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Hexachlorocyclopentadiene	0.102	U	1.46	0.102	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Hexachloroethane	0.0195	U *	0.302	0.0195	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Indeno[1,2,3-cd]pyrene	0.0201	U	0.302	0.0201	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Isophorone	0.0155	U *	0.302	0.0155	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
1-Methylnaphthalene	0.0102	U	0.302	0.0102	mg/Kg		03/16/21 15:25	03/24/21 04:36	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 32-BG-S-3-4-210303 Lab Sample ID: 560-92998-4

Date Collected: 03/03/21 14:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.0174	U *	0.302	0.0174	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Naphthalene	0.0284	U *	0.302	0.0284	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Nitrobenzene	0.0201	U	0.302	0.0201	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
N-Nitrosodi-n-butylamine	0.0884	U	0.302	0.0884	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
N-Nitrosodiethylamine	0.0595	U	0.302	0.0595	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
N-Nitrosodimethylamine	0.0338	U *	0.302	0.0338	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
N-Nitrosodiphenylamine	0.0192	U	0.302	0.0192	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
N-Nitrosopyrrolidine	0.0585	U	0.302	0.0585	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Pentachlorobenzene	0.0595	U	0.302	0.0595	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Phenanthrene	0.0155	U	0.302	0.0155	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Pyrene	0.0111	U	0.302	0.0111	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
1,2,4,5-Tetrachlorobenzene	0.0448	U *	0.302	0.0448	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
2,4-Dichlorophenol	0.00915	U *	0.302	0.00915	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dinitrophenols	0.305	U	1.46	0.305	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dinitro-o-cresol	0.302	U	1.46	0.302	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Pentachlorophenol	0.302	U	1.46	0.302	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
2,4,6-Trichlorophenol	0.00915	U	0.302	0.00915	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
2,4,5-Trichlorophenol	0.00915	U	0.302	0.00915	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Atrazine	0.0338	U	0.302	0.0338	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
bis (2-chloroisopropyl) ether	0.0210	U	0.302	0.0210	mg/Kg		03/16/21 15:25	03/24/21 04:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*54*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*
2-Fluorobiphenyl	*58*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*
Terphenyl-d14	*73*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*
Phenol-d5 (Surr)	*57*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*
2-Fluorophenol	*54*		*43 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*
2,4,6-Tribromophenol	*57*		*35 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0647	U	0.101	0.0647	mg/Kg		03/11/21 09:04	03/11/21 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*20 - 140*	*03/11/21 09:04*	*03/11/21 16:19*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	35.4	U	51.2	35.4	mg/Kg		03/09/21 09:20	03/10/21 11:40	1
C28-C36	35.4	U	51.2	35.4	mg/Kg		03/09/21 09:20	03/10/21 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*49*		*39 - 120*	*03/09/21 09:20*	*03/10/21 11:40*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.930	U	5.11	0.930	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Hexachlorocyclohexane, gamma-	1.83	U	5.11	1.83	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Hexachlorocyclohexane, beta-	1.77	U	5.11	1.77	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Hexachlorocyclohexane, delta-	1.73	U	5.11	1.73	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Heptachlor	1.62	U	5.11	1.62	ug/Kg		03/11/21 08:26	03/15/21 19:58	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 32-BG-S-3-4-210303
Lab Sample ID: 560-92998-4
Date Collected: 03/03/21 14:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	0.787	U	5.11	0.787	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Heptachlor epoxide	1.47	U	5.11	1.47	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Endosulfan I	1.23	U	5.11	1.23	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Dieldrin	1.12	U	5.11	1.12	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Endrin	1.94	U	5.11	1.94	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Endosulfan II	1.51	U	5.11	1.51	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
DDT	1.16	U	5.11	1.16	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Endrin aldehyde	1.34	U	5.11	1.34	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Endosulfan sulfate	1.31	U *	5.11	1.31	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Chlordane (technical)	12.3	U	51.1	12.3	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Toxaphene	25.6	U	102	25.6	ug/Kg		03/11/21 08:26	03/15/21 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 120*	*03/11/21 08:26*	*03/15/21 19:58*	*1*
DCB Decachlorobiphenyl	*90*		*13 - 135*	*03/11/21 08:26*	*03/15/21 19:58*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1221	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1232	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1242	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1248	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1254	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1260	0.0102	U	0.0337	0.0102	mg/Kg		03/19/21 07:31	03/19/21 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*32 - 132*	*03/19/21 07:31*	*03/19/21 18:16*	*1*
DCB Decachlorobiphenyl	*82*		*57 - 138*	*03/19/21 07:31*	*03/19/21 18:16*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U	0.0939	0.0213	mg/Kg		03/16/21 15:34	03/18/21 07:10	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0404	U	0.188	0.0404	mg/Kg		03/16/21 15:34	03/18/21 07:10	1
2,4,6-Trinitrotoluene	0.0288	U	0.0939	0.0288	mg/Kg		03/16/21 15:34	03/18/21 07:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*		*83 - 122*	*03/16/21 15:34*	*03/18/21 07:10*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.107**	**J**	0.471	0.0776	ug/Kg		03/11/21 12:20	03/12/21 20:44	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.214	U	0.743	0.214	ug/Kg		03/16/21 13:05	04/01/21 12:27	1
Perfluorohexanesulfonic acid (PFHxS)	0.260	U	0.743	0.260	ug/Kg		03/16/21 13:05	04/01/21 12:27	1
Perfluorooctanesulfonic acid (PFOS)	0.130	U	0.743	0.130	ug/Kg		03/16/21 13:05	04/01/21 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*99*		*57 - 153*	*03/16/21 13:05*	*04/01/21 12:27*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 32-BG-S-3-4-210303 Lab Sample ID: 560-92998-4

Date Collected: 03/03/21 14:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: DV-LC-0012 - Fluorinated Alkyl Substances (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	104		70 - 130	03/16/21 13:05	04/01/21 12:27	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.704	U	1.88	0.704	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Arsenic	**3.95**	**J**	9.39	3.76	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Barium	**266**		18.8	4.70	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Beryllium	0.376	U	0.939	0.376	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Cadmium	0.225	U	0.470	0.225	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Chromium	4.23	U	9.39	4.23	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Iron	**1970**		113	56.3	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Copper	3.76	U	9.39	3.76	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Manganese	**24.2**		4.70	1.88	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Lead	**1.30**	**J**	2.82	1.17	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Antimony	1.88	U	4.70	1.88	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Selenium	3.01	U	4.70	3.01	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Thallium	1.88	U	4.70	1.88	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Zinc	18.8	U	47.0	18.8	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Uranium	**0.428**	**J**	0.939	0.376	mg/Kg		03/19/21 09:44	03/22/21 18:17	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0178**	**J b**	0.0309	0.0103	mg/Kg		03/24/21 17:26	03/24/21 20:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.207	U	0.543	0.207	mg/Kg		03/15/21 18:53	03/15/21 21:21	1
pH	**8.3**	**HF**	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**25.8**		9.84	4.85	mg/Kg			03/22/21 19:02	1
Nitrite as N	0.853	U	4.92	0.853	mg/Kg			03/22/21 19:02	1
Fluoride	**8.30**		0.492	0.329	mg/Kg			03/22/21 19:02	1
Nitrate as N	**4.26**	**J**	4.92	1.38	mg/Kg			03/22/21 19:02	1
Nitrate Nitrite as N	**4.26**	**J**	4.92	0.272	mg/Kg			03/22/21 19:02	1
Sulfate	**125**		9.84	3.83	mg/Kg			03/22/21 19:02	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**164**		10.0	10.0	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.09**		0.214	0.242	1.00	0.146	pCi/g	03/11/21 17:46	04/01/21 10:14	1
Radium-228	0.0598	U	0.0481	0.0484		0.474	pCi/g	03/11/21 17:46	04/01/21 10:14	1
Combined Radium 226 + 228	**1.15**		0.219	0.247		0.474	pCi/g	03/11/21 17:46	04/01/21 10:14	1

Eurofins Xenco, Corpus Christi

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 560-183349/16 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183349

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.730	U	5.00	0.730	ug/Kg			03/06/21 16:51	1
Chloromethane	1.20	U	5.00	1.20	ug/Kg			03/06/21 16:51	1
Vinyl chloride	0.600	U	5.00	0.600	ug/Kg			03/06/21 16:51	1
Bromomethane	1.10	U	5.00	1.10	ug/Kg			03/06/21 16:51	1
Trichlorofluoromethane	0.500	U	5.00	0.500	ug/Kg			03/06/21 16:51	1
Acrolein	8.60	U	50.0	8.60	ug/Kg			03/06/21 16:51	1
1,1-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/06/21 16:51	1
trans-1,2-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/06/21 16:51	1
Methyl tert-butyl ether	0.610	U	5.00	0.610	ug/Kg			03/06/21 16:51	1
1,3-Dichlorobenzene	0.310	U	5.00	0.310	ug/Kg			03/06/21 16:51	1
Methylene Chloride	5.00	U	25.0	5.00	ug/Kg			03/06/21 16:51	1
Acrylonitrile	3.60	U	50.0	3.60	ug/Kg			03/06/21 16:51	1
cis-1,2-Dichloroethene	0.570	U	5.00	0.570	ug/Kg			03/06/21 16:51	1
Carbon tetrachloride	0.510	U	5.00	0.510	ug/Kg			03/06/21 16:51	1
Benzene	0.630	U	5.00	0.630	ug/Kg			03/06/21 16:51	1
1,2-Dichloroethane	0.520	U	5.00	0.520	ug/Kg			03/06/21 16:51	1
Trichloroethene	0.280	U	5.00	0.280	ug/Kg			03/06/21 16:51	1
1,1,1-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/06/21 16:51	1
1,1-Dichloroethane	0.590	U	5.00	0.590	ug/Kg			03/06/21 16:51	1
1,2-Dichloropropane	0.500	U	5.00	0.500	ug/Kg			03/06/21 16:51	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/06/21 16:51	1
Chloroform	0.870	U	5.00	0.870	ug/Kg			03/06/21 16:51	1
Bromodichloromethane	0.200	U	5.00	0.200	ug/Kg			03/06/21 16:51	1
1,1-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/06/21 16:51	1
cis-1,3-Dichloropropene	0.450	U	5.00	0.450	ug/Kg			03/06/21 16:51	1
Toluene	0.900	U	5.00	0.900	ug/Kg			03/06/21 16:51	1
trans-1,3-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/06/21 16:51	1
1,1,2-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/06/21 16:51	1
Tetrachloroethene	0.740	U	5.00	0.740	ug/Kg			03/06/21 16:51	1
1,3-Dichloropropene, Total	0.520	U	5.00	0.520	ug/Kg			03/06/21 16:51	1
1,2-Dibromoethane	0.300	U	5.00	0.300	ug/Kg			03/06/21 16:51	1
Monochlorobenzene	0.300	U	5.00	0.300	ug/Kg			03/06/21 16:51	1
Ethylbenzene	0.450	U	5.00	0.450	ug/Kg			03/06/21 16:51	1
Xylenes, Total	0.500	U	10.0	0.500	ug/Kg			03/06/21 16:51	1
Styrene	0.300	U	5.00	0.300	ug/Kg			03/06/21 16:51	1
Tribromomethane	0.510	U	5.00	0.510	ug/Kg			03/06/21 16:51	1
1,1,2,2-Tetrachloroethane	0.380	U	5.00	0.380	ug/Kg			03/06/21 16:51	1
1,4-Dichlorobenzene	0.320	U	5.00	0.320	ug/Kg			03/06/21 16:51	1
1,2-Dichlorobenzene	0.250	U	5.00	0.250	ug/Kg			03/06/21 16:51	1
1,2,4-Trichlorobenzene	0.970	U	5.00	0.970	ug/Kg			03/06/21 16:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*65 - 152*		*03/06/21 16:51*	*1*
Toluene-d8 (Surr)	*99*		*65 - 139*		*03/06/21 16:51*	*1*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 560-183349/12 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183349

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	40.0	30.69		ug/Kg		77	13 - 130
Chloromethane	40.0	33.35		ug/Kg		83	61 - 137
Vinyl chloride	40.0	33.57		ug/Kg		84	65 - 139
Bromomethane	40.0	36.60		ug/Kg		92	57 - 155
Trichlorofluoromethane	40.0	33.42		ug/Kg		84	68 - 146
Acrolein	395	315.0		ug/Kg		80	20 - 150
1,1-Dichloroethene	40.0	33.83		ug/Kg		85	70 - 130
trans-1,2-Dichloroethene	40.0	33.47		ug/Kg		84	70 - 132
Methyl tert-butyl ether	40.0	35.53		ug/Kg		89	70 - 130
1,3-Dichlorobenzene	40.0	31.35		ug/Kg		78	70 - 130
Methylene Chloride	40.0	33.93		ug/Kg		85	61 - 150
Acrylonitrile	400	332.4		ug/Kg		83	66 - 137
cis-1,2-Dichloroethene	40.0	36.44		ug/Kg		91	70 - 130
Carbon tetrachloride	40.0	35.95		ug/Kg		90	70 - 136
Benzene	40.0	34.17		ug/Kg		85	70 - 131
1,2-Dichloroethane	40.0	33.96		ug/Kg		85	70 - 130
Trichloroethene	40.0	34.36		ug/Kg		86	70 - 130
1,1,1-Trichloroethane	40.0	35.16		ug/Kg		88	70 - 132
1,1-Dichloroethane	40.0	34.28		ug/Kg		86	70 - 130
1,2-Dichloropropane	40.0	33.46		ug/Kg		84	70 - 130
1,4-Dioxane	800	723.5		ug/Kg		90	10 - 150
Chloroform	40.0	34.71		ug/Kg		87	70 - 130
Bromodichloromethane	40.0	37.10		ug/Kg		93	70 - 130
1,1-Dichloropropene	40.0	32.57		ug/Kg		81	70 - 130
cis-1,3-Dichloropropene	40.0	36.19		ug/Kg		90	70 - 130
Toluene	40.0	33.20		ug/Kg		83	70 - 130
trans-1,3-Dichloropropene	40.0	33.83		ug/Kg		85	70 - 131
1,1,2-Trichloroethane	40.0	34.43		ug/Kg		86	70 - 130
Tetrachloroethene	40.0	34.12		ug/Kg		85	70 - 130
1,3-Dichloropropene, Total	80.0	70.02		ug/Kg		88	
1,2-Dibromoethane	40.0	36.14		ug/Kg		90	70 - 130
Monochlorobenzene	40.0	33.42		ug/Kg		84	70 - 130
Ethylbenzene	40.0	34.02		ug/Kg		85	70 - 130
Xylenes, Total	80.0	69.13		ug/Kg		86	70 - 130
Styrene	40.0	36.74		ug/Kg		92	70 - 130
Tribromomethane	40.0	34.50		ug/Kg		86	59 - 137
1,1,2,2-Tetrachloroethane	40.0	34.50		ug/Kg		86	70 - 130
1,4-Dichlorobenzene	40.0	30.80		ug/Kg		77	70 - 130
1,2-Dichlorobenzene	40.0	31.34		ug/Kg		78	70 - 130
1,2,4-Trichlorobenzene	40.0	32.27		ug/Kg		81	68 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*65 - 152*
Toluene-d8 (Surr)	*100*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 560-183349/13 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183349

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			40.0	37.32		ug/Kg		93	13 - 130	20	30.0
Chloromethane			40.0	40.40		ug/Kg		101	61 - 137	19	30.0
Vinyl chloride			40.0	40.71		ug/Kg		102	65 - 139	19	30.0
Bromomethane			40.0	44.98		ug/Kg		112	57 - 155	21	30.0
Trichlorofluoromethane			40.0	42.45		ug/Kg		106	68 - 146	24	30.0
Acrolein			395	382.3		ug/Kg		97	20 - 150	19	30.0
1,1-Dichloroethene			40.0	42.93		ug/Kg		107	70 - 130	24	30.0
trans-1,2-Dichloroethene			40.0	42.14		ug/Kg		105	70 - 132	23	30.0
Methyl tert-butyl ether			40.0	43.13		ug/Kg		108	70 - 130	19	30.0
1,3-Dichlorobenzene			40.0	39.13		ug/Kg		98	70 - 130	22	30.0
Methylene Chloride			40.0	41.78		ug/Kg		104	61 - 150	21	30.0
Acrylonitrile			400	408.0		ug/Kg		102	66 - 137	20	30.0
cis-1,2-Dichloroethene			40.0	45.09		ug/Kg		113	70 - 130	21	30.0
Carbon tetrachloride			40.0	44.63		ug/Kg		112	70 - 136	22	30.0
Benzene			40.0	42.15		ug/Kg		105	70 - 131	21	30.0
1,2-Dichloroethane			40.0	41.91		ug/Kg		105	70 - 130	21	30.0
Trichloroethene			40.0	42.35		ug/Kg		106	70 - 130	21	30.0
1,1,1-Trichloroethane			40.0	43.97		ug/Kg		110	70 - 132	22	30.0
1,1-Dichloroethane			40.0	42.28		ug/Kg		106	70 - 130	21	30.0
1,2-Dichloropropane			40.0	41.71		ug/Kg		104	70 - 130	22	30.0
1,4-Dioxane			800	816.9		ug/Kg		102	10 - 150	12	30.0
Chloroform			40.0	43.36		ug/Kg		108	70 - 130	22	30.0
Bromodichloromethane			40.0	46.51		ug/Kg		116	70 - 130	23	30.0
1,1-Dichloropropene			40.0	41.43		ug/Kg		104	70 - 130	24	30.0
cis-1,3-Dichloropropene			40.0	45.09		ug/Kg		113	70 - 130	22	30.0
Toluene			40.0	41.06		ug/Kg		103	70 - 130	21	30.0
trans-1,3-Dichloropropene			40.0	43.17		ug/Kg		108	70 - 131	24	30.0
1,1,2-Trichloroethane			40.0	42.63		ug/Kg		107	70 - 130	21	30.0
Tetrachloroethene			40.0	44.19		ug/Kg		110	70 - 130	26	30.0
1,3-Dichloropropene, Total			80.0	88.27		ug/Kg		110		23	30
1,2-Dibromoethane			40.0	44.77		ug/Kg		112	70 - 130	21	30.0
Monochlorobenzene			40.0	41.41		ug/Kg		104	70 - 130	21	30.0
Ethylbenzene			40.0	42.01		ug/Kg		105	70 - 130	21	30.0
Xylenes, Total			80.0	86.65		ug/Kg		108	70 - 130	22	30.0
Styrene			40.0	45.62		ug/Kg		114	70 - 130	22	30.0
Tribromomethane			40.0	42.66		ug/Kg		107	59 - 137	21	30.0
1,1,2,2-Tetrachloroethane			40.0	41.73		ug/Kg		104	70 - 130	19	30.0
1,4-Dichlorobenzene			40.0	38.70		ug/Kg		97	70 - 130	23	30.0
1,2-Dichlorobenzene			40.0	38.95		ug/Kg		97	70 - 130	22	30.0
1,2,4-Trichlorobenzene			40.0	40.36		ug/Kg		101	68 - 140	22	30.0

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*65 - 152*
Toluene-d8 (Surr)	*100*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8270D - Pesticides by GC/MS

Lab Sample ID: MB 400-523876/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 524066 — **Prep Batch: 523876**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	12.0	U	66.0	12.0	ug/Kg		03/16/21 09:18	03/17/21 16:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*104*		*30 - 164*	*03/16/21 09:18*	*03/17/21 16:37*	*1*

Lab Sample ID: LCS 400-523876/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 524066 — **Prep Batch: 523876**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Prometon	333	290.2		ug/Kg		87	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Triphenylphosphate	*90*		*30 - 164*

Lab Sample ID: 560-92998-1 MS — **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 524066 — **Prep Batch: 523876**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Prometon	11.9	U	326	288.4		ug/Kg		88	40 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Triphenylphosphate	*95*		*30 - 164*

Lab Sample ID: 560-92998-1 MSD — **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 524066 — **Prep Batch: 523876**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Prometon	11.9	U	322	273.8		ug/Kg		85	40 - 140	5	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Triphenylphosphate	*102*		*30 - 164*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-529214/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 529432 — **Prep Batch: 529214**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U	0.330	0.0103	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Acenaphthylene	0.0821	U	0.330	0.0821	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Anthracene	0.0170	U	0.330	0.0170	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Benzidine	0.990	U	3.30	0.990	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Benzo[a]anthracene	0.0200	U	0.330	0.0200	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Benzo[b]fluoranthene	0.0262	U	0.330	0.0262	mg/Kg		03/16/21 15:25	03/17/21 23:48	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-529214/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529432 **Prep Batch: 529214**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.0400	U	0.330	0.0400	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Benzo[g,h,i]perylene	0.0160	U	0.330	0.0160	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Benzo[a]pyrene	0.0200	U	0.330	0.0200	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Bis(2-chloroethyl)ether	0.0166	U	0.330	0.0166	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Di (2-ethylhexyl)phthalate	0.0460	U	0.330	0.0460	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Chrysene	0.0270	U	0.330	0.0270	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Dibenz(a,h)anthracene	0.0190	U	0.330	0.0190	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Dichlorobenzidine, 3,3'-	0.0900	U	0.660	0.0900	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Diethyl phthalate	0.0260	U	0.660	0.0260	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Dimethyl phthalate	0.0230	U	0.330	0.0230	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Dibutylphthalate	0.0290	U	0.330	0.0290	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
2,4-Dinitrotoluene	0.0660	U	0.330	0.0660	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
2,6-Dinitrotoluene	0.0280	U	0.330	0.0280	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U	0.330	0.0220	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Fluoranthene	0.0360	U	0.330	0.0360	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Fluorene	0.0180	U	0.330	0.0180	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Hexachlorobenzene	0.0290	U	0.330	0.0290	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Hexachlorobutadiene	0.0100	U	0.330	0.0100	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Hexachlorocyclopentadiene	0.111	U	1.60	0.111	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Hexachloroethane	0.0213	U	0.330	0.0213	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Indeno[1,2,3-cd]pyrene	0.0220	U	0.330	0.0220	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Isophorone	0.0170	U	0.330	0.0170	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
1-Methylnaphthalene	0.0112	U	0.330	0.0112	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
2-Methylnaphthalene	0.0190	U	0.330	0.0190	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Naphthalene	0.0310	U	0.330	0.0310	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Nitrobenzene	0.0220	U	0.330	0.0220	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
N-Nitrosodi-n-butylamine	0.0967	U	0.330	0.0967	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
N-Nitrosodiethylamine	0.0650	U	0.330	0.0650	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
N-Nitrosodimethylamine	0.0370	U	0.330	0.0370	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
N-Nitrosodiphenylamine	0.0210	U	0.330	0.0210	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
N-Nitrosopyrrolidine	0.0640	U	0.330	0.0640	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Pentachlorobenzene	0.0650	U	0.330	0.0650	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Phenanthrene	0.0170	U	0.330	0.0170	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Pyrene	0.0121	U	0.330	0.0121	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
1,2,4,5-Tetrachlorobenzene	0.0490	U	0.330	0.0490	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
2,4-Dichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Dinitrophenols	0.333	U	1.60	0.333	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Dinitro-o-cresol	0.330	U	1.60	0.330	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Pentachlorophenol	0.330	U	1.60	0.330	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
2,4,6-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
2,4,5-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
Atrazine	0.0370	U	0.330	0.0370	mg/Kg		03/16/21 15:25	03/17/21 23:48	1
bis (2-chloroisopropyl) ether	0.0230	U	0.330	0.0230	mg/Kg		03/16/21 15:25	03/17/21 23:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*64*		*46 - 120*	*03/16/21 15:25*	*03/17/21 23:48*	*1*
2-Fluorobiphenyl	*67*		*46 - 120*	*03/16/21 15:25*	*03/17/21 23:48*	*1*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-529214/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529432 **Prep Batch: 529214**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	89		46 - 120	03/16/21 15:25	03/17/21 23:48	1
Phenol-d5 (Surr)	64		46 - 120	03/16/21 15:25	03/17/21 23:48	1
2-Fluorophenol	61		43 - 120	03/16/21 15:25	03/17/21 23:48	1
2,4,6-Tribromophenol	69		35 - 120	03/16/21 15:25	03/17/21 23:48	1

Lab Sample ID: LCS 280-529214/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529432 **Prep Batch: 529214**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	2.67	1.852		mg/Kg		69	62 - 120
Acenaphthylene	2.67	1.888		mg/Kg		71	64 - 120
Anthracene	2.67	2.093		mg/Kg		78	66 - 120
Benzidine	5.33	1.972	J	mg/Kg		37	5 - 120
Benzo[a]anthracene	2.67	2.165		mg/Kg		81	64 - 120
Benzo[b]fluoranthene	2.67	2.116		mg/Kg		79	58 - 120
Benzo[k]fluoranthene	2.67	2.198		mg/Kg		82	62 - 120
Benzo[g,h,i]perylene	2.67	2.063		mg/Kg		77	58 - 120
Benzo[a]pyrene	2.67	2.119		mg/Kg		79	65 - 120
Bis(2-chloroethyl)ether	2.67	1.585		mg/Kg		59	57 - 120
Di (2-ethylhexyl)phthalate	2.67	2.335		mg/Kg		88	65 - 120
Chrysene	2.67	2.075		mg/Kg		78	65 - 120
Dibenz(a,h)anthracene	2.67	2.105		mg/Kg		79	56 - 120
Dichlorobenzidine, 3,3'-	5.33	3.756		mg/Kg		70	22 - 120
Diethyl phthalate	2.67	2.068		mg/Kg		78	68 - 120
Dimethyl phthalate	2.67	2.028		mg/Kg		76	66 - 120
Dibutylphthalate	2.67	2.169		mg/Kg		81	66 - 120
2,4-Dinitrotoluene	2.67	2.152		mg/Kg		81	68 - 120
2,6-Dinitrotoluene	2.67	2.044		mg/Kg		77	68 - 120
1,2-Diphenylhydrazine(as Azobenzene)	2.70	1.931		mg/Kg		72	60 - 120
Fluoranthene	2.67	2.133		mg/Kg		80	64 - 120
Fluorene	2.67	1.982		mg/Kg		74	66 - 120
Hexachlorobenzene	2.67	1.906		mg/Kg		71	65 - 120
Hexachlorobutadiene	2.67	1.566		mg/Kg		59	58 - 120
Hexachlorocyclopentadiene	5.33	3.262		mg/Kg		61	43 - 120
Hexachloroethane	2.67	1.488		mg/Kg		56	56 - 120
Indeno[1,2,3-cd]pyrene	2.67	2.075		mg/Kg		78	46 - 120
Isophorone	2.67	1.643		mg/Kg		62	56 - 120
1-Methylnaphthalene	2.67	1.732		mg/Kg		65	57 - 120
2-Methylnaphthalene	2.67	1.748		mg/Kg		66	60 - 120
Naphthalene	2.67	1.724		mg/Kg		65	59 - 120
Nitrobenzene	2.67	1.612		mg/Kg		60	55 - 120
N-Nitrosodimethylamine	2.67	1.413		mg/Kg		53	50 - 120
N-Nitrosodiphenylamine	2.67	2.096		mg/Kg		79	65 - 120
Phenanthrene	2.67	2.052		mg/Kg		77	67 - 120
Pyrene	2.67	2.250		mg/Kg		84	66 - 120
1,2,4,5-Tetrachlorobenzene	2.67	1.620		mg/Kg		61	60 - 120
2,4-Dichlorophenol	2.67	1.862		mg/Kg		70	64 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-529214/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529432 **Prep Batch: 529214**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dinitrophenols			5.33	4.371		mg/Kg		82	52 - 120		
Dinitro-o-cresol			5.33	4.484		mg/Kg		84	60 - 120		
Pentachlorophenol			5.33	4.008		mg/Kg		75	50 - 120		
2,4,6-Trichlorophenol			2.67	1.923		mg/Kg		72	64 - 120		
2,4,5-Trichlorophenol			2.67	2.003		mg/Kg		75	65 - 120		
Atrazine			2.67	2.088		mg/Kg		78	50 - 150		
bis (2-chloroisopropyl) ether			2.67	1.554		mg/Kg		58	46 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*60*		*46 - 120*
2-Fluorobiphenyl	*64*		*46 - 120*
Terphenyl-d14	*89*		*46 - 120*
Phenol-d5 (Surr)	*64*		*46 - 120*
2-Fluorophenol	*62*		*43 - 120*
2,4,6-Tribromophenol	*73*		*35 - 120*

Lab Sample ID: LCSD 280-529214/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529432 **Prep Batch: 529214**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene			2.67	1.743		mg/Kg		65	62 - 120	6	30
Acenaphthylene			2.67	1.773		mg/Kg		66	64 - 120	6	30
Anthracene			2.67	2.107		mg/Kg		79	66 - 120	1	30
Benzidine			5.33	1.968	J	mg/Kg		37	5 - 120	0	50
Benzo[a]anthracene			2.67	2.173		mg/Kg		81	64 - 120	0	30
Benzo[b]fluoranthene			2.67	2.091		mg/Kg		78	58 - 120	1	30
Benzo[k]fluoranthene			2.67	2.132		mg/Kg		80	62 - 120	3	30
Benzo[g,h,i]perylene			2.67	2.022		mg/Kg		76	58 - 120	2	30
Benzo[a]pyrene			2.67	2.065		mg/Kg		77	65 - 120	3	30
Bis(2-chloroethyl)ether			2.67	1.433	*	mg/Kg		54	57 - 120	10	30
Di (2-ethylhexyl)phthalate			2.67	2.303		mg/Kg		86	65 - 120	1	30
Chrysene			2.67	2.092		mg/Kg		78	65 - 120	1	30
Dibenz(a,h)anthracene			2.67	2.076		mg/Kg		78	56 - 120	1	30
Dichlorobenzidine, 3,3'-			5.33	3.924		mg/Kg		74	22 - 120	4	30
Diethyl phthalate			2.67	2.079		mg/Kg		78	68 - 120	1	30
Dimethyl phthalate			2.67	2.000		mg/Kg		75	66 - 120	1	30
Dibutylphthalate			2.67	2.176		mg/Kg		82	66 - 120	0	30
2,4-Dinitrotoluene			2.67	2.174		mg/Kg		82	68 - 120	1	30
2,6-Dinitrotoluene			2.67	2.029		mg/Kg		76	68 - 120	1	30
1,2-Diphenylhydrazine(as Azobenzene)			2.70	1.905		mg/Kg		71	60 - 120	1	30
Fluoranthene			2.67	2.162		mg/Kg		81	64 - 120	1	30
Fluorene			2.67	1.939		mg/Kg		73	66 - 120	2	30
Hexachlorobenzene			2.67	1.868		mg/Kg		70	65 - 120	2	30
Hexachlorobutadiene			2.67	1.430	*	mg/Kg		54	58 - 120	9	30
Hexachlorocyclopentadiene			5.33	2.771		mg/Kg		52	43 - 120	16	30
Hexachloroethane			2.67	1.353	*	mg/Kg		51	56 - 120	10	30
Indeno[1,2,3-cd]pyrene			2.67	2.010		mg/Kg		75	46 - 120	3	30

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-529214/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529432 **Prep Batch: 529214**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isophorone			2.67	1.474	*	mg/Kg		55	56 - 120	11	30
1-Methylnaphthalene			2.67	1.568		mg/Kg		59	57 - 120	10	30
2-Methylnaphthalene			2.67	1.564	*	mg/Kg		59	60 - 120	11	30
Naphthalene			2.67	1.543	*	mg/Kg		58	59 - 120	11	30
Nitrobenzene			2.67	1.456		mg/Kg		55	55 - 120	10	30
N-Nitrosodimethylamine			2.67	1.270	*	mg/Kg		48	50 - 120	11	30
N-Nitrosodiphenylamine			2.67	2.074		mg/Kg		78	65 - 120	1	30
Phenanthrene			2.67	2.086		mg/Kg		78	67 - 120	2	30
Pyrene			2.67	2.212		mg/Kg		83	66 - 120	2	30
1,2,4,5-Tetrachlorobenzene			2.67	1.491	*	mg/Kg		56	60 - 120	8	30
2,4-Dichlorophenol			2.67	1.637	*	mg/Kg		61	64 - 120	13	30
Dinitrophenols			5.33	4.296		mg/Kg		81	52 - 120	2	30
Dinitro-o-cresol			5.33	4.535		mg/Kg		85	60 - 120	1	30
Pentachlorophenol			5.33	4.067		mg/Kg		76	50 - 120	1	30
2,4,6-Trichlorophenol			2.67	1.865		mg/Kg		70	64 - 120	3	30
2,4,5-Trichlorophenol			2.67	1.922		mg/Kg		72	65 - 120	4	30
Atrazine			2.67	2.049		mg/Kg		77	50 - 150	2	30
bis (2-chloroisopropyl) ether			2.67	1.396		mg/Kg		52	46 - 120	11	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*55*		*46 - 120*
2-Fluorobiphenyl	*58*		*46 - 120*
Terphenyl-d14	*87*		*46 - 120*
Phenol-d5 (Surr)	*55*		*46 - 120*
2-Fluorophenol	*54*		*43 - 120*
2,4,6-Tribromophenol	*71*		*35 - 120*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 240-476391/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476394 **Prep Batch: 476391**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0642	U	0.100	0.0642	mg/Kg		03/11/21 09:04	03/11/21 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*20 - 140*	*03/11/21 09:04*	*03/11/21 12:04*	*1*

Lab Sample ID: LCS 240-476391/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476394 **Prep Batch: 476391**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]			0.800	0.7482		mg/Kg		94	75 - 126		

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 240-476391/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476394 — **Prep Batch: 476391**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Trifluorotoluene (Surr)	81		20 - 140

Lab Sample ID: 560-92998-1 MS — **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476394 — **Prep Batch: 476391**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	0.0639	U	0.800	0.7051		mg/Kg		88	10 - 134

Surrogate	MS %Recovery	MS Qualifier	Limits
Trifluorotoluene (Surr)	103		20 - 140

Lab Sample ID: 560-92998-1 MSD — **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476394 — **Prep Batch: 476391**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	0.0639	U	0.797	0.7752		mg/Kg		97	10 - 134	9	40

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Trifluorotoluene (Surr)	81		20 - 140

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 240-476013/8-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476195 — **Prep Batch: 476013**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.6	U	50.0	34.6	mg/Kg		03/09/21 09:20	03/10/21 13:52	1
C28-C36	34.6	U	50.0	34.6	mg/Kg		03/09/21 09:20	03/10/21 13:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	84		39 - 120	03/09/21 09:20	03/10/21 13:52	1

Lab Sample ID: LCS 240-476013/9-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476195 — **Prep Batch: 476013**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10 - C28]	250	185.1		mg/Kg		74	49 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	71		39 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: 560-92998-4 MS **Client Sample ID: Cell 32-BG-S-3-4-210303**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476195 **Prep Batch: 476013**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10 - C28]	35.4	U	258	145.0		mg/Kg		56	13 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl (Surr)	*54*		*39 - 120*

Lab Sample ID: 560-92998-4 MSD **Client Sample ID: Cell 32-BG-S-3-4-210303**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476195 **Prep Batch: 476013**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10 - C28]	35.4	U	254	163.4		mg/Kg		64	13 - 138	12	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*60*		*39 - 120*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 240-476004/23-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476477 **Prep Batch: 476004**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.910	U	5.00	0.910	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Hexachlorocyclohexane, gamma-	1.79	U	5.00	1.79	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Hexachlorocyclohexane, beta-	1.73	U	5.00	1.73	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Hexachlorocyclohexane, delta-	1.69	U	5.00	1.69	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Heptachlor	1.58	U	5.00	1.58	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Aldrin	0.770	U	5.00	0.770	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Heptachlor epoxide	1.44	U	5.00	1.44	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Endosulfan I	1.20	U	5.00	1.20	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Dieldrin	1.10	U	5.00	1.10	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Endrin	1.90	U	5.00	1.90	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Endosulfan II	1.48	U	5.00	1.48	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
DDT	1.13	U	5.00	1.13	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Endrin aldehyde	1.31	U	5.00	1.31	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Endosulfan sulfate	1.28	U	5.00	1.28	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Chlordane (technical)	12.0	U	50.0	12.0	ug/Kg		03/09/21 08:55	03/11/21 17:44	1
Toxaphene	25.0	U	100	25.0	ug/Kg		03/09/21 08:55	03/11/21 17:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 120*	*03/09/21 08:55*	*03/11/21 17:44*	*1*
DCB Decachlorobiphenyl	*93*		*13 - 135*	*03/09/21 08:55*	*03/11/21 17:44*	*1*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Job ID: 560-92998-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 240-476004/24-A
Matrix: Solid
Analysis Batch: 476477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476004

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclohexane, alpha-	100	78.92		ug/Kg		79	48 - 120
Hexachlorocyclohexane, gamma-	100	70.91		ug/Kg		71	39 - 120
Hexachlorocyclohexane, beta-	100	79.65		ug/Kg		80	45 - 120
Hexachlorocyclohexane, delta-	100	77.90		ug/Kg		78	33 - 120
Heptachlor	100	85.20		ug/Kg		85	48 - 120
Aldrin	100	78.96		ug/Kg		79	36 - 120
Heptachlor epoxide	100	82.21		ug/Kg		82	51 - 120
Endosulfan I	100	70.30		ug/Kg		70	28 - 120
Dieldrin	100	84.67		ug/Kg		85	47 - 120
Endrin	100	87.41		ug/Kg		87	28 - 136
Endosulfan II	100	67.14		ug/Kg		67	39 - 120
DDT	100	87.17		ug/Kg		87	48 - 120
Endrin aldehyde	100	69.80		ug/Kg		70	38 - 120
Endosulfan sulfate	100	91.62		ug/Kg		92	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*71*		*30 - 120*
DCB Decachlorobiphenyl	*75*		*13 - 135*

Lab Sample ID: 560-92998-1 MS
Matrix: Solid
Analysis Batch: 476652

Client Sample ID: Cell 30-BG-S-3-4-210302
Prep Type: Total/NA
Prep Batch: 476004

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclohexane, alpha-	0.894	U	96.5	76.46		ug/Kg		79	30 - 120
Hexachlorocyclohexane, gamma-	1.76	U	96.5	68.14		ug/Kg		71	27 - 120
Hexachlorocyclohexane, beta-	1.70	U	96.5	76.97		ug/Kg		80	20 - 120
Hexachlorocyclohexane, delta-	1.66	U	96.5	75.06		ug/Kg		78	20 - 120
Heptachlor	1.55	U	96.5	81.07		ug/Kg		84	35 - 120
Aldrin	0.756	U	96.5	73.93		ug/Kg		77	15 - 120
Heptachlor epoxide	1.41	U	96.5	75.01		ug/Kg		78	32 - 120
Endosulfan I	1.18	U	96.5	60.49		ug/Kg		63	10 - 120
Dieldrin	1.08	U	96.5	79.26		ug/Kg		82	29 - 120
Endrin	1.87	U	96.5	82.62		ug/Kg		86	26 - 129
Endosulfan II	1.45	U	96.5	56.49		ug/Kg		59	21 - 120
DDT	1.11	U	96.5	79.80		ug/Kg		83	19 - 125
Endrin aldehyde	1.29	U	96.5	69.55		ug/Kg		72	18 - 120
Endosulfan sulfate	1.26	U	96.5	96.08		ug/Kg		100	27 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*69*		*30 - 120*
DCB Decachlorobiphenyl	*76*		*13 - 135*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 560-92998-1 MSD **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476652 **Prep Batch: 476004**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorocyclohexane, alpha-	0.894	U	97.4	79.09		ug/Kg		81	30 - 120	3	40
Hexachlorocyclohexane, gamma-	1.76	U	97.4	71.72		ug/Kg		74	27 - 120	5	40
Hexachlorocyclohexane, beta-	1.70	U	97.4	80.87		ug/Kg		83	20 - 120	5	40
Hexachlorocyclohexane, delta-	1.66	U	97.4	77.17		ug/Kg		79	20 - 120	3	40
Heptachlor	1.55	U	97.4	84.49		ug/Kg		87	35 - 120	4	40
Aldrin	0.756	U	97.4	77.50		ug/Kg		80	15 - 120	5	40
Heptachlor epoxide	1.41	U	97.4	79.58		ug/Kg		82	32 - 120	6	40
Endosulfan I	1.18	U	97.4	66.31		ug/Kg		68	10 - 120	9	40
Dieldrin	1.08	U	97.4	84.55		ug/Kg		87	29 - 120	6	40
Endrin	1.87	U	97.4	87.97		ug/Kg		90	26 - 129	6	40
Endosulfan II	1.45	U	97.4	65.04		ug/Kg		67	21 - 120	14	40
DDT	1.11	U	97.4	86.46		ug/Kg		89	19 - 125	8	40
Endrin aldehyde	1.29	U	97.4	72.84		ug/Kg		75	18 - 120	5	40
Endosulfan sulfate	1.26	U	97.4	104.3		ug/Kg		107	27 - 120	8	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*71*		*30 - 120*
DCB Decachlorobiphenyl	*83*		*13 - 135*

Lab Sample ID: MB 240-476383/16-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.910	U	5.00	0.910	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, gamma-	1.79	U	5.00	1.79	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, beta-	1.73	U	5.00	1.73	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, delta-	1.69	U	5.00	1.69	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Heptachlor	1.58	U	5.00	1.58	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Aldrin	0.770	U	5.00	0.770	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Heptachlor epoxide	1.44	U	5.00	1.44	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan I	1.20	U	5.00	1.20	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Dieldrin	1.10	U	5.00	1.10	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endrin	1.90	U	5.00	1.90	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan II	1.48	U	5.00	1.48	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
DDT	1.13	U	5.00	1.13	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endrin aldehyde	1.31	U	5.00	1.31	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan sulfate	1.28	U	5.00	1.28	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Chlordane (technical)	12.0	U	50.0	12.0	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Toxaphene	25.0	U	100	25.0	ug/Kg		03/11/21 08:26	03/15/21 18:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*30 - 120*	*03/11/21 08:26*	*03/15/21 18:53*	*1*
DCB Decachlorobiphenyl	*94*		*13 - 135*	*03/11/21 08:26*	*03/15/21 18:53*	*1*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 240-476383/17-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclohexane, alpha-	100	89.42		ug/Kg		89	48 - 120
Hexachlorocyclohexane, gamma-	100	78.54		ug/Kg		79	39 - 120
Hexachlorocyclohexane, beta-	100	93.41		ug/Kg		93	45 - 120
Hexachlorocyclohexane, delta-	100	92.21		ug/Kg		92	33 - 120
Heptachlor	100	95.75		ug/Kg		96	48 - 120
Aldrin	100	88.39		ug/Kg		88	36 - 120
Heptachlor epoxide	100	93.19		ug/Kg		93	51 - 120
Endosulfan I	100	80.39		ug/Kg		80	28 - 120
Dieldrin	100	97.12		ug/Kg		97	47 - 120
Endrin	100	99.57		ug/Kg		100	28 - 136
Endosulfan II	100	77.49		ug/Kg		77	39 - 120
DDT	100	104.2		ug/Kg		104	48 - 120
Endrin aldehyde	100	86.66		ug/Kg		87	38 - 120
Endosulfan sulfate	100	122.8	*	ug/Kg		123	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*76*		*30 - 120*
DCB Decachlorobiphenyl	*101*		*13 - 135*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 560-183757/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1221	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1232	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1242	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1248	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1254	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1260	0.0100	U	0.0330	0.0100	mg/Kg		03/19/21 07:31	03/19/21 15:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*99*		*32 - 132*	*03/19/21 07:31*	*03/19/21 15:35*	*1*
DCB Decachlorobiphenyl	*88*		*57 - 138*	*03/19/21 07:31*	*03/19/21 15:35*	*1*

Lab Sample ID: LCS 560-183757/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	0.667	0.5077		mg/Kg		76	40 - 130
Aroclor 1260	0.667	0.4822		mg/Kg		72	40 - 130

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 560-183757/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	91		32 - 132
DCB Decachlorobiphenyl	78		57 - 138

Lab Sample ID: 560-92998-1 MS **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	0.00531	U	0.695	0.5440		mg/Kg		78	40 - 130
Aroclor 1260	0.0104	U	0.695	0.6006		mg/Kg		86	40 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	104		32 - 132
DCB Decachlorobiphenyl	89		57 - 138

Lab Sample ID: 560-92998-1 MSD **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	0.00531	U	0.677	0.4446		mg/Kg		66	40 - 130	20	50
Aroclor 1260	0.0104	U	0.677	0.4742		mg/Kg		70	40 - 130	24	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	81		32 - 132
DCB Decachlorobiphenyl	72		57 - 138

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-529222/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529390 **Prep Batch: 529222**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0227	U	0.100	0.0227	mg/Kg		03/16/21 15:34	03/18/21 05:15	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0430	U	0.200	0.0430	mg/Kg		03/16/21 15:34	03/18/21 05:15	1
2,4,6-Trinitrotoluene	0.0307	U	0.100	0.0307	mg/Kg		03/16/21 15:34	03/18/21 05:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	93		83 - 122	03/16/21 15:34	03/18/21 05:15	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Lab Sample ID: LCS 280-529222/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529390 **Prep Batch: 529222**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	1.00	0.9950		mg/Kg		100	80 - 120
Hexahydro-1,3,5-trinitro-1,3,5-triazine	1.00	1.011		mg/Kg		101	80 - 124
2,4,6-Trinitrotoluene	1.00	1.020		mg/Kg		102	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*95*		*83 - 122*

Lab Sample ID: 560-92998-4 MS **Client Sample ID: Cell 32-BG-S-3-4-210303**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529390 **Prep Batch: 529222**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U	0.934	0.9263		mg/Kg		99	80 - 120
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0404	U	0.934	0.8860		mg/Kg		95	80 - 124
2,4,6-Trinitrotoluene	0.0288	U	0.934	0.9465		mg/Kg		101	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*96*		*83 - 122*

Lab Sample ID: 560-92998-4 MSD **Client Sample ID: Cell 32-BG-S-3-4-210303**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529390 **Prep Batch: 529222**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U	0.924	0.9064		mg/Kg		98	80 - 120	2	30
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0404	U	0.924	0.8666		mg/Kg		94	80 - 124	2	30
2,4,6-Trinitrotoluene	0.0288	U	0.924	0.9306		mg/Kg		101	80 - 120	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*94*		*83 - 122*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Lab Sample ID: MB 280-528801/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 528997 **Prep Batch: 528801**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0824	U	0.500	0.0824	ug/Kg		03/11/21 12:20	03/12/21 19:48	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS (Continued)

Lab Sample ID: LCS 280-528801/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528997 — **Prep Batch: 528801**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	0.500	0.5037		ug/Kg		101	80 - 120

Lab Sample ID: 560-92998-1 MS — **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528997 — **Prep Batch: 528801**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	0.223	J	0.470	0.7304		ug/Kg		108	70 - 130

Lab Sample ID: 560-92998-1 MSD — **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528997 — **Prep Batch: 528801**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	0.223	J	0.477	0.7280		ug/Kg		106	70 - 130	0	15

Lab Sample ID: DLCK 280-528995/12 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528995

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	0.0500	0.04765	J	ug/L		95	70 - 130

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Lab Sample ID: MB 280-529188/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 531134 — **Prep Batch: 529188**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.230	U	0.800	0.230	ug/Kg		03/16/21 13:05	04/01/21 11:25	1
Perfluorohexanesulfonic acid (PFHxS)	0.280	U	0.800	0.280	ug/Kg		03/16/21 13:05	04/01/21 11:25	1
Perfluorooctanesulfonic acid (PFOS)	0.140	U	0.800	0.140	ug/Kg		03/16/21 13:05	04/01/21 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 11:25*	*1*
13C8 PFOS	*100*		*70 - 130*	*03/16/21 13:05*	*04/01/21 11:25*	*1*

Lab Sample ID: LCS 280-529188/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 531134 — **Prep Batch: 529188**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	20.0	18.68		ug/Kg		93	70 - 131
Perfluorohexanesulfonic acid (PFHxS)	18.2	16.44		ug/Kg		90	70 - 135
Perfluorooctanesulfonic acid (PFOS)	18.6	15.23		ug/Kg		82	70 - 130

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: DV-LC-0012 - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 280-529188/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531134 **Prep Batch: 529188**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
13C8 PFOA	99		57 - 153
13C8 PFOS	105		70 - 130

Lab Sample ID: 560-92998-1 MS **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531134 **Prep Batch: 529188**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	0.213	U	19.2	17.38		ug/Kg		91	70 - 131
Perfluorohexanesulfonic acid (PFHxS)	0.260	U	17.4	15.07		ug/Kg		86	70 - 135
Perfluorooctanesulfonic acid (PFOS)	0.130	U	17.8	14.16		ug/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
13C8 PFOA	99		57 - 153
13C8 PFOS	101		70 - 130

Lab Sample ID: 560-92998-1 MSD **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531134 **Prep Batch: 529188**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanoic acid (PFOA)	0.213	U	19.7	17.62		ug/Kg		89	70 - 131	1	30
Perfluorohexanesulfonic acid (PFHxS)	0.260	U	18.0	15.28		ug/Kg		85	70 - 135	1	30
Perfluorooctanesulfonic acid (PFOS)	0.130	U	18.3	14.41		ug/Kg		79	70 - 130	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
13C8 PFOA	98		57 - 153
13C8 PFOS	103		70 - 130

Lab Sample ID: DLCK 280-530729/13 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530729

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	0.500	0.5778	J	ug/L		116	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	0.455	0.4461	J	ug/L		98	70 - 130
Perfluorooctanesulfonic acid (PFOS)	0.464	0.665	U	ug/L		98	70 - 130

Surrogate	DLCK %Recovery	DLCK Qualifier	Limits
13C8 PFOA	105		57 - 153
13C8 PFOS	106		70 - 130

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Job ID: 560-92998-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 160-502509/1-A ^2
Matrix: Solid
Analysis Batch: 502781

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 502509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0665	U	0.177	0.0665	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Arsenic	0.355	U	0.887	0.355	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Barium	0.443	U	1.77	0.443	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Beryllium	0.0355	U	0.0887	0.0355	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Cadmium	0.0213	U	0.0443	0.0213	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Chromium	0.399	U	0.887	0.399	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Iron	5.32	U	10.6	5.32	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Copper	0.355	U	0.887	0.355	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Manganese	0.177	U	0.443	0.177	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Lead	0.111	U	0.266	0.111	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Antimony	0.177	U	0.443	0.177	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Selenium	0.284	U	0.443	0.284	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Thallium	0.177	U	0.443	0.177	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Zinc	1.77	U	4.43	1.77	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Uranium	0.0355	U	0.0887	0.0355	mg/Kg		03/19/21 09:44	03/22/21 17:36	2

Lab Sample ID: LCS 160-502509/2-A ^2
Matrix: Solid
Analysis Batch: 502781

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 502509

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	17.1	15.65		mg/Kg		92	66 - 133
Arsenic	85.5	85.16		mg/Kg		100	70 - 131
Barium	85.5	78.95		mg/Kg		92	74 - 125
Beryllium	8.55	8.465		mg/Kg		99	74 - 126
Cadmium	85.5	80.12		mg/Kg		94	73 - 139
Chromium	85.5	85.48		mg/Kg		100	69 - 130
Iron	855	866.4		mg/Kg		101	32 - 167
Copper	85.5	85.02		mg/Kg		99	73 - 126
Manganese	85.5	86.58		mg/Kg		101	77 - 124
Lead	85.5	83.70		mg/Kg		98	80 - 120
Antimony	42.7	39.55		mg/Kg		93	21 - 251
Selenium	42.7	42.00		mg/Kg		98	69 - 131
Thallium	17.1	16.39		mg/Kg		96	68 - 131
Zinc	85.5	89.37		mg/Kg		105	71 - 128
Uranium	85.5	81.97		mg/Kg		96	80 - 120

Lab Sample ID: 560-92998-1 MS
Matrix: Solid
Analysis Batch: 502781

Client Sample ID: Cell 30-BG-S-3-4-210302
Prep Type: Total/NA
Prep Batch: 502509

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.703	U	19.1	17.80		mg/Kg		93	75 - 125
Arsenic	3.75	U	95.4	98.76		mg/Kg		104	75 - 125
Barium	280		95.4	372.9		mg/Kg		98	75 - 125
Beryllium	0.375	U	9.54	9.233		mg/Kg		97	75 - 125
Cadmium	0.225	U	95.4	91.04		mg/Kg		95	75 - 125
Chromium	4.22	U	95.4	97.05		mg/Kg		102	75 - 125
Iron	2670		954	4313	N1	mg/Kg		173	75 - 125

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 560-92998-1 MS **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502781 **Prep Batch: 502509**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	3.75	U	95.4	94.30		mg/Kg		99	75 - 125
Manganese	31.9		95.4	129.3		mg/Kg		102	75 - 125
Lead	1.98	J	95.4	97.44		mg/Kg		100	75 - 125
Antimony	1.87	U	47.7	34.83	N1	mg/Kg		73	75 - 125
Selenium	3.00	U	47.7	47.43		mg/Kg		99	75 - 125
Thallium	1.87	U	19.1	18.78		mg/Kg		98	75 - 125
Zinc	18.7	U	95.4	104.2		mg/Kg		109	75 - 125
Uranium	0.414	J	95.4	97.81		mg/Kg		102	75 - 125

Lab Sample ID: 560-92998-1 MSD **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502781 **Prep Batch: 502509**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.703	U	17.2	16.96		mg/Kg		98	75 - 125	5	30
Arsenic	3.75	U	86.2	93.10		mg/Kg		108	75 - 125	6	30
Barium	280		86.2	413.8	N1	mg/Kg		155	75 - 125	10	30
Beryllium	0.375	U	8.62	8.962		mg/Kg		104	75 - 125	3	30
Cadmium	0.225	U	86.2	88.76		mg/Kg		103	75 - 125	3	30
Chromium	4.22	U	86.2	92.96		mg/Kg		108	75 - 125	4	30
Iron	2670		862	4639	N1	mg/Kg		229	75 - 125	7	30
Copper	3.75	U	86.2	90.09		mg/Kg		105	75 - 125	5	30
Manganese	31.9		86.2	130.3		mg/Kg		114	75 - 125	1	30
Lead	1.98	J	86.2	94.62		mg/Kg		107	75 - 125	3	30
Antimony	1.87	U	43.1	31.46	N1	mg/Kg		73	75 - 125	10	30
Selenium	3.00	U	43.1	44.42		mg/Kg		103	75 - 125	7	30
Thallium	1.87	U	17.2	18.19		mg/Kg		105	75 - 125	3	30
Zinc	18.7	U	86.2	100.4		mg/Kg		116	75 - 125	4	30
Uranium	0.414	J	86.2	92.73		mg/Kg		107	75 - 125	5	30

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 160-502981/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 503591 **Prep Batch: 502981**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.01147	J	0.0298	0.00993	mg/Kg		03/24/21 17:26	03/24/21 20:28	1

Lab Sample ID: LCSSRM 160-502981/2-A ^20 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 503591 **Prep Batch: 502981**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	18.4	14.29		mg/Kg		77.6	59.8 - 159.2

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 560-92998-1 MS **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 503591 **Prep Batch: 502981**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0143	J b	0.808	0.7979		mg/Kg		97	80 - 120

Lab Sample ID: 560-92998-1 MSD **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 503591 **Prep Batch: 502981**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0143	J b	0.796	0.7803		mg/Kg		96	80 - 120	2	30

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 240-476390/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476440 **Prep Batch: 476390**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.190	U	0.500	0.190	mg/Kg		03/11/21 09:04	03/11/21 10:46	1

Lab Sample ID: LCS 240-476390/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476440 **Prep Batch: 476390**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	5.71	6.161		mg/Kg		108	65 - 128

Lab Sample ID: MRL 240-476440/10 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476440

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0100	0.01130		mg/L		113	70 - 130

Lab Sample ID: MB 240-476868/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476877 **Prep Batch: 476868**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.190	U	0.500	0.190	mg/Kg		03/15/21 18:53	03/15/21 21:18	1

Lab Sample ID: LCS 240-476868/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476877 **Prep Batch: 476868**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	5.71	6.041		mg/Kg		106	65 - 128

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: 560-92998-4 MS **Client Sample ID: Cell 32-BG-S-3-4-210303**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476877 **Prep Batch: 476868**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.207	U	1.00	0.8800		mg/Kg		88	24 - 140

Lab Sample ID: 560-92998-4 MSD **Client Sample ID: Cell 32-BG-S-3-4-210303**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476877 **Prep Batch: 476868**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.207	U	1.00	0.7850		mg/Kg		79	24 - 140	11	40

Method: 9045D - pH

Lab Sample ID: LCS 560-183451/2 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183451

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH			5.00	5.0		SU		100	98 - 102

Lab Sample ID: 560-92998-1 DU **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183451

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.0	HF		8.0		SU				0.1	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-477911/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477727

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.93	U	10.0	4.93	mg/Kg			03/22/21 17:13	1
Fluoride	0.334	U	0.500	0.334	mg/Kg			03/22/21 17:13	1
Sulfate	3.89	U	10.0	3.89	mg/Kg			03/22/21 17:13	1

Lab Sample ID: LCS 240-477911/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477727

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			500	502.0		mg/Kg		100	90 - 110
Fluoride			25.0	26.61		mg/Kg		106	90 - 110
Sulfate			500	508.1		mg/Kg		102	90 - 110

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 560-92998-4 MS — **Client Sample ID: Cell 32-BG-S-3-4-210303**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477727

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.8		492	577.2		mg/Kg		112	80 - 120
Fluoride	8.30		24.6	36.79		mg/Kg		116	80 - 120
Sulfate	125		492	659.4		mg/Kg		109	80 - 120

Lab Sample ID: 560-92998-4 MSD — **Client Sample ID: Cell 32-BG-S-3-4-210303**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477727

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	25.8		492	578.6		mg/Kg		112	80 - 120	0	15
Fluoride	8.30		24.6	37.01		mg/Kg		117	80 - 120	1	15
Sulfate	125		492	661.1		mg/Kg		109	80 - 120	0	15

Lab Sample ID: MB 240-477911/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477728

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.867	U	5.00	0.867	mg/Kg			03/22/21 17:13	1
Nitrate as N	1.41	U	5.00	1.41	mg/Kg			03/22/21 17:13	1
Nitrate Nitrite as N	0.276	U	5.00	0.276	mg/Kg			03/22/21 17:13	1

Lab Sample ID: LCS 240-477911/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477728

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	25.0	25.27		mg/Kg		101	90 - 110
Nitrate as N	25.0	25.71		mg/Kg		103	90 - 110

Lab Sample ID: 560-92998-4 MS — **Client Sample ID: Cell 32-BG-S-3-4-210303**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477728

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	0.853	U	24.6	25.29		mg/Kg		103	80 - 120
Nitrate as N	4.26	J	24.6	31.80		mg/Kg		112	80 - 120

Lab Sample ID: 560-92998-4 MSD — **Client Sample ID: Cell 32-BG-S-3-4-210303**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477728

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrite as N	0.853	U	24.6	26.26		mg/Kg		107	80 - 120	4	15
Nitrate as N	4.26	J	24.6	31.94		mg/Kg		112	80 - 120	0	15

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: 9065 - Phenolics, Total Recoverable

Lab Sample ID: MB 240-478900/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 478913 — **Prep Batch: 478900**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

Lab Sample ID: LCS 240-478900/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 478913 — **Prep Batch: 478900**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenols, Total	48.6	49.81		mg/Kg		102	59 - 120

Lab Sample ID: 560-92998-1 MS — **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 478913 — **Prep Batch: 478900**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenols, Total	0.338	U	2.00	2.098		mg/Kg		105	42 - 151

Lab Sample ID: 560-92998-1 MSD — **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 478913 — **Prep Batch: 478900**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenols, Total	0.338	U	2.00	2.048		mg/Kg		102	42 - 151	2	25

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 560-183718/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			03/16/21 14:30	1

Lab Sample ID: LCS 560-183718/2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	2250	2088		mg/L		93	90 - 110

Lab Sample ID: 560-92998-1 DU — **Client Sample ID: Cell 30-BG-S-3-4-210302**
Matrix: Solid — **Prep Type: 7 Day Leach**
Analysis Batch: 183718

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	160		162.0		mg/L		1	20

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-501605/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 503967 **Prep Batch: 501605**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.04249	U	0.199	0.199	1.00	0.369	pCi/g	03/11/21 17:46	04/01/21 10:44	1
Radium-228	-0.06443	U	0.229	0.229		0.361	pCi/g	03/11/21 17:46	04/01/21 10:44	1
Combined Radium 226 + 228	-0.1069	U	0.303	0.303		0.369	pCi/g	03/11/21 17:46	04/01/21 10:44	1

Lab Sample ID: LCS 160-501605/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 503968 **Prep Batch: 501605**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Americium-241	96.4	97.99		11.5		1.21	pCi/g	102	87 - 116
Cesium-137	26.5	28.51		3.00		0.266	pCi/g	107	87 - 120
Cobalt-60	9.10	9.606		1.02		0.167	pCi/g	106	87 - 115

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Laboratory: Eurofins Xenco, Corpus Christi

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Louisiana	NELAP	05094	06-30-21
Oklahoma	State	2020-006	08-31-21
Texas	NELAP	T104704210-19-23	03-31-21
USDA	US Federal Programs	P330-18-00314	10-31-21

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-22
Illinois	NELAP	200004	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-22
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Laboratory: Eurofins TestAmerica, Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21
A2LA	ISO/IEC 17025	2907.01	10-31-21
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-28-22
Arizona	State	AZ0713	12-21-21
Arkansas DEQ	State	19-047-0	06-01-21
California	State	2513	01-08-22
Connecticut	State	PH-0686	11-30-22
Florida	NELAP	E87667-57	07-01-21
Georgia	State	4025-011	01-08-22
Illinois	NELAP	2000172019-1	04-30-21
Iowa	State	IA#370	12-02-21
Kansas	NELAP	E-10166	04-30-21
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-21
Minnesota	NELAP	1788752	12-31-21
Nevada	State	CO000262020-1	04-18-21
New Hampshire	NELAP	205319	04-28-21
New Jersey	NELAP	190002	06-30-21
New York	NELAP	59923	04-01-22
North Carolina (WW/SW)	State	358	12-31-21
North Dakota	State	R-034	01-08-22
Oklahoma	State	2018-006	09-01-21
Oregon	NELAP	4025-011	01-08-22
Pennsylvania	NELAP	013	07-31-21
South Carolina	State	72002001	01-08-22
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-20-18	09-30-21
US Fish & Wildlife	US Federal Programs	058448	08-01-21
USDA	US Federal Programs	P330-20-00065	03-06-23
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-21
Virginia	NELAP	10490	06-14-21
Washington	State	C583-19	08-03-21
West Virginia DEP	State	354	11-30-21
Wisconsin	State	999615430	08-31-21
Wyoming (UST)	A2LA	2907.01	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-21
Florida	NELAP	E81010	06-30-21
Georgia	State	E81010(FL)	06-30-21
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-21
Tennessee	State	TN02907	06-30-21
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-21
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-21

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-07-21
ANAB	Dept. of Energy	L2305.01	04-07-21
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21 *
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193	04-20-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	XEN CC
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL DEN
8270D	Pesticides by GC/MS	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL CAN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
8081A	Organochlorine Pesticides (GC)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	XEN CC
8330B	Nitroaromatics and Nitramines (HPLC)	SW846	TAL DEN
6860	Perchlorate by IC/MS or IC/MS/MS	EPA	TAL DEN
DV-LC-0012	Fluorinated Alkyl Substances	TAL-DEN	TAL DEN
6020	Metals (ICP/MS)	SW846	TAL SL
7471A	Mercury (CVAA)	SW846	TAL SL
9012B	Cyanide, Total andor Amenable	SW846	TAL CAN
9045D	pH	SW846	XEN CC
9056A	Anions, Ion Chromatography	SW846	TAL CAN
9065	Phenolics, Total Recoverable	SW846	TAL CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	XEN CC
GA-01-R	Radium-226 & Other Gamma Emitters (GS)	DOE	TAL SL
3050B	Preparation, Metals	SW846	TAL SL
335.521	TCEQ- 7-Day Distilled Water Leachate Extraction	TAC-30	XEN CC
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PEN
3546	Microwave Extraction	SW846	XEN CC
3550C	Ultrasonic Extraction	SW846	TAL DEN
5030A	Purge and Trap	SW846	TAL CAN
5030B	Purge and Trap	SW846	XEN CC
6860	Deionized Water Leach Prep	SW846	TAL DEN
7471A	Preparation, Mercury	SW846	TAL SL
8330B	Sonication Extraction (Explosives)	SW846	TAL DEN
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL CAN
DI Leach	Deionized Water Leaching Procedure	ASTM	TAL CAN
Distill/Phenol	Distillation, Phenolics	None	TAL CAN
Dry and Grind	Preparation, Dry and Grind	None	TAL SL
Fill_Geo-21	Fill Geometry, 21-Day In-Growth	None	TAL SL
Increment, prep	ISM - Dry, Disaggregate, Sieve, 2 D Slabcake Subsample	EPA	TAL DEN
PFC leach	Leaching procedure for PFAS	TAL-DEN	TAL DEN

Protocol References:

ASTM = ASTM International
DOE = U.S. Department of Energy
EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAC-30 = Chapter 30 Of The Texas Administrative Code, May 19, 1995.
TAL-DEN = TestAmerica Laboratories, Denver, Facility Standard Operating Procedure.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Method	Method Description	Protocol	Laboratory

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

XEN CC = Eurofins Xenco, Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2471

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
560-92998-1	Cell 30-BG-S-3-4-210302	Solid	03/02/21 15:40	03/04/21 11:40	
560-92998-2	Cell 29-BG-S-3-4-210302	Solid	03/02/21 11:40	03/04/21 11:40	
560-92998-3	Cell 31-BG-S-3-4-210303	Solid	03/03/21 12:15	03/04/21 11:40	
560-92998-4	Cell 32-BG-S-3-4-210303	Solid	03/03/21 14:40	03/04/21 11:40	

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 92998

Address: 630 Plaza Drive Suite 100	Due Date Requested:
City: Highlands Ranch	TAT Requested (days): Std
State, Zip: CO, 80129-2377	PO #:
Phone: 303-710-7537(Tel)	WO #:
Email: Alison.Schaffer@arcadis.com	Project #: 56008683
Project Name: Chevron - Jal Land Farm Soils	SSOW#:
Site: Chevron Land farm	

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
Cell 30-BG-S-3-4-210302	3/02/21	1540	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell 29-BG-S-3-4-210302	3/02/21	1140	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	

Loc: 560
92998

560-92998 Chain of Custody

3/02/21

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/2/21 1700	Arcadis		3/3/21 1310	EX
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.4 IR-13 1.0 CF

Ver: 01/16/2019

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 92998

Address: 630 Plaza Drive Suite 100	Due Date Requested: —	
City: Highlands Ranch	TAT Requested (days): Std	
State, Zip: CO, 80129-2377	PO #:	
Phone: 303-710-7537(Tel)	WO #:	
Email: Alison.Schaffer@arcadis.com	Project #: 56008683	
Project Name: Chevron - Jal Land Farm Soils	SSOW#:	
Site: Jal Landfarm		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
Cell 31-BG-S-3-4-210303	3/3/21	1215	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell 32-BG-S-3-4-210303	3/3/21	1440	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank	—	—	—	Solid																
				Solid																
				Solid																
				Solid																
				Solid																
				Solid																
				Solid																
				Solid																
				Solid																
				Solid																

3/03/21

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	3/03/21 1700	Arcadis		3/4/21 1140	EX
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.4 IR-13 2.1 CF

Ver: 01/16/2019

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22901.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-92998-1
Address: 13715 Rider Trail North, .	Due Date Requested: 3/31/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/02/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/3050B_2% (MOD) Copy Analytes	GA_01_R_Ra/Dry_Grind (MOD) Radium-226/228	7471A/7471A_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Cell 30-BG-S-3-4-210302 (560-92998-1)	3/2/21	15:40 Central		Solid			X	X	X	2	
Cell 29-BG-S-3-4-210302 (560-92998-2)	3/2/21	11:40 Central		Solid			X	X	X	2	
Cell 31-BG-S-3-4-210303 (560-92998-3)	3/3/21	12:15 Central		Solid			X	X	X	2	
Cell 32-BG-S-3-4-210303 (560-92998-4)	3/3/21	14:40 Central		Solid			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	3/5/21 1640	EX	FED EX		
FED EX					
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 3/5/21 0915	Company ETA-STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∧ Yes ∧ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11.01.2020

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Shipping Order Form

eurofins | Environment Testing America

[redacted]

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2471 Fax (361) 289-2673

Shipping Order ID: 35358 | **Ship Via: FedEx Ground** | **Due On: 3/5/2021 11:59:00PM**

Ship To Information

Project Manager:

Company Name: TestAmerica Laboratories, Inc.
Attention: Shipping/Receiving
Address 1: 13715 Rider Trail North
Address 2:
Address 3:
City: Earth City
State: MO
Zip: 63045
Phone #: 314-298-8566
Project Ref:

Notes to Bottle/Shipping Department

Shipping Method: **Standard packing**

- ☐ Ready to Fill
- ☐ Preprinted COC
  - ☐ Number of COC Copies
- ☐ Seals on Bottle
- ☐ Seals on Coolers
- ☐ Priority
- ☐ Return Shipment Labels
  - ☐ Prepaid Return
  - Eurofins Xenco, Corpus Christi
- ☐ Short Hold Times
- ☑ Temperature Control
- ☐ Rush

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.
Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.
Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

Printed on 3/5/2021 4:39:26PM

Shipping Order ID: 35358

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Bottle Order Information

Bottle Order:
Bottle Order #:
Request From Client: 3/5/2021
Date Order Posted:
Order Status: Ready To Process
Prepared By:
Deliver By Date: ***3/5/2021 11:59:00PM***
Lab Project Number:

Order Completion Information

Creator: Jeffery Hunter
Filled by:
Sent Date:
Sent Via:
Tracking #:

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #

Notes to Field Staff:

Scan QR code for field sampler instructions

Health and Safety Notes:

Preservative | Comment

Relinquished By	Company	Date	Time	Received By	Company	Seal #: Seal #: Seal #:
Relinquished By	Company	Date	Time	Received By	Company	Seal #: Seal #: Seal #:

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.
Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

3-7136

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22899.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-92998-1
Address: 4101 Shuffel Street NW.	Due Date Requested: 3/31/2021			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/02/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

C018

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/3546 (MOD) Copy Analytes	8015_HC_Calc	8015C_GRO/5035A_FW Gasoline Range Organics [C6-C10]	9056A/DI_LEACH	9056A_28D/DI_LEACH (MOD) Pick List	8081A/3540C (MOD) Priority Pollutant List	9012B/9012B_Prep	9065/Distill_Phenol	Total Number of containers
			Preservation Code:												
Cell 30-BG-S-3-4-210302 (560-92998-1)	3/2/21	15:40 Central		Solid			X	X	X	X	X	X	X	X	2
Cell 29-BG-S-3-4-210302 (560-92998-2)	3/2/21	11:40 Central		Solid			X	X	X	X	X	X	X	X	2
Cell 31-BG-S-3-4-210303 (560-92998-3)	3/3/21	12:15 Central		Solid			X	X	X	X	X	X	X	X	2
Cell 32-BG-S-3-4-210303 (560-92998-4)	3/3/21	14:40 Central		Solid			X	X	X	X	X	X	X	X	2

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Amy Kelley	3/5/21 1640	EX		3-6-21 1040	Etp
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11.01.2020

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22902.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-92998-1
Address: 4955 Yarrow Street,	Due Date Requested: 3/31/2021			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/02/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6860/6860_Prep Standard 6860 list	PFC/PFC_Leach (MOD) Custom List	8330B/ISM_DD_SI_SS (MOD) DOD Sublist	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Cell 30-BG-S-3-4-210302 (560-92998-1)	3/2/21	15:40 Central		Solid			X	X	X	2	ism subsampling is not required.
Cell 29-BG-S-3-4-210302 (560-92998-2)	3/2/21	11:40 Central		Solid			X	X	X	2	ism subsampling is not required.
Cell 31-BG-S-3-4-210303 (560-92998-3)	3/3/21	12:15 Central		Solid			X	X	X	2	ism subsampling is not required.
Cell 32-BG-S-3-4-210303 (560-92998-4)	3/3/21	14:40 Central		Solid			X	X	X	2	ism subsampling is not required.

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Amy Talley	3/5/21 1640	EX		3/6/21 1000	Eurofins
2						
3						

Custody Seals Intact: ∧ Yes ∧ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.8, 1.9, 1.2 IR

Ver: 11.01.2020

Released to Imaging: 5/27/2022 3:16:29 PM

Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22903.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-92998-1
Address: 3355 McLemore Drive,	Due Date Requested: 3/31/2021			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/02/2021	Project #: 56008683			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_AgChem/3546 (MOD) Copy Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code						
Cell 30-BG-S-3-4-210302 (560-92998-1)	3/2/21	15:40 Central		Solid			X	2	
Cell 29-BG-S-3-4-210302 (560-92998-2)	3/2/21	11:40 Central		Solid			X	2	
Cell 31-BG-S-3-4-210303 (560-92998-3)	3/3/21	12:15 Central		Solid			X	2	
Cell 32-BG-S-3-4-210303 (560-92998-4)	3/3/21	14:40 Central		Solid			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 3/5/21 1700	Company EX	Received by:	Date/Time: 3-6-21 1023	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.0°C IR7				

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-92998-1

Login Number: 92998 **List Source: Eurofins Xenco, Corpus Christi**
List Number: 1
Creator: Tuley, Amy E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-92998-1

Login Number: 92998
List Number: 3
Creator: O'Hara, Jake F

List Source: Eurofins TestAmerica, Denver
List Creation: 03/06/21 02:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-92998-1

Login Number: 92998 **List Source: Eurofins TestAmerica, Denver**
List Number: 6 **List Creation: 03/11/21 12:40 PM**
Creator: Levegood, William D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-92998-1

Login Number: 92998
List Number: 4
Creator: Conrady, Hank W

List Source: Eurofins TestAmerica, Pensacola
List Creation: 03/06/21 03:38 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-92998-1

Login Number: 92998
List Number: 2
Creator: O'Gara, Mallory L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 03/06/21 10:42 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2471

Laboratory Job ID: 560-93041-1
Client Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

For:
ARCADIS U.S., Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Attn: Alison Schaffer

Authorized for release by:
4/19/2021 1:34:24 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

LCMS

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Job ID: 560-93041-1

Laboratory: Eurofins Xenco, Corpus Christi

Narrative

Job Narrative
560-93041-1

Comments
No additional comments.

Receipt
The samples were received on 3/5/2021 11:48 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) in preparation batch 280-529681 and analytical batch 280-531704 recovered outside control limits for multiple analytes. The associated samples are outside 2x hold time; therefore the data has been reported. The following samples are affected: Cell 37 -BG-S-3-4-210302 (560-93041-1), Cell 33 -BG-S-3-4-210302 (560-93041-2), (LCS 280-529681/2-A), (560-93104-L-1-A), (560-93104-L-1-B MS) and (560-93104-L-1-C MSD)

Method 8270D: Surrogate recovery for the following samples in preparation batch 280-529681 and analytical batch 280-531704 was outside control limits: (560-93104-L-1-C MSD). Evidence of matrix interferences is not obvious. The samples are outside 2x hold time; therefore the data has been reported.

Method 8270D: The surrogate recovery for the blank associated with preparation batch 280-529681 and analytical batch 280-531704 was outside the upper control limits. The associated samples are outside 2x hold time; therefore the data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 240-476383 and analytical batch 240-476838 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8081A: The laboratory control sample (LCS) for preparation batch 240-476383 and analytical batch 240-476838 recovered outside control limits for the following analyte: Endosulfan sulfate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

RAD
Methods 901.1, GA-01-R: Gamma prep batch 160-501638:

Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from	Reported to Analyte
Th-234	Pa-234
Th-234	U-238
Pb-210	Po-210
Pb-210	Bi-210
Cs-137	Ba-137m
Pb-212	Po-216

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Job ID: 560-93041-1 (Continued)

Laboratory: Eurofins Xenco, Corpus Christi (Continued)

Xe-131m	Xe-131
Sb-125	Te-125m
Ag-108m	Ag-108
Rh-106	Ru-106
Pb-212	Th-228
Pb-212	Ra-224
U-235	Th-231
Ac-228	Th-232
Ac-228	Ra-228
Th-227	Ra-223
Th-227	Ac-227
Th-227	Bi-211
Th-227	Pb-211
Bi-214	Ra-226

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
Cell 37 -BG-S-3-4-210302 (560-93041-1), Cell 33 -BG-S-3-4-210302 (560-93041-2), (LCS 160-501638/2-A), (MB 160-501638/1-A), (180-118045-G-1-B) and (180-118045-G-1-C DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6020: Due to the high concentration of iron, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-501560 and analytical batch 160-502417 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.(560-93104-B-1-B MS ^2) and (560-93104-B-1-C MSD ^2)

Method 6020: analytical batch 160-502417 The internal standard was outside QC limits in the CCV. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported. (CCV 160-502417/54)

Method 6020: The post digestion spike % recovery for iron associated with batch preparation batch 160-501560 and analytical batch 160-502417 was outside of control limits. The associated sample is: (560-93104-B-1-A PDS ^2).

Method 6020: preparation batch 160-501560 and analytical batch 160-502614 The following sample was diluted to bring the concentration of target analytes within the calibration range: (560-93104-B-1-A ^5). Elevated reporting limits (RLs) are provided.

Method 6020: The post digestion spike % recovery for barium associated with batch preparation batch 160-501560 and analytical batch 160-502614 was outside of control limits. The associated sample is: (560-93104-B-1-A PDS ^5).

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-501560 and analytical batch 160-502614 were outside control limits for antimony. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.(560-93104-B-1-B MS ^5) and (560-93104-B-1-C MSD ^5)

Method 6020: preparation batch 160-501560 and analytical batch 160-502417
The internal standard was outside QC limits in the method blank. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported. (MB 160-501560/1-A ^2)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Job ID: 560-93041-1 (Continued)

Laboratory: Eurofins Xenco, Corpus Christi (Continued)

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 9045D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Cell 37 -BG-S-3-4-210302 (560-93041-1), Cell 33 -BG-S-3-4-210302 (560-93041-2) and (560-92998-A-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 6860: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: The samples arrived in clear glass containers but the SOP requires amber glass containers.

Cell 37 -BG-S-3-4-210302 (560-93041-1) and Cell 33 -BG-S-3-4-210302 (560-93041-2)

6860

preparation batch 280-528801

Methods Increment, prep: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: As requested in the method comments, the ISM subsampling portion of the ISM prep process was not performed on Cell 37 -BG-S-3-4-210302 (560-93041-1) and Cell 33 -BG-S-3-4-210302 (560-93041-2) in preparation batch 280-528815 by ISM_DD_SI_SS for 8330B_Sonc_10g / 8330B.

Method 3550C: The following samples was received outside of holding time: Cell 37 -BG-S-3-4-210302 (560-93041-1) and Cell 33 -BG-S-3-4-210302 (560-93041-2) for preparation batch 280-529681 method 3550C/8270D.

Method 3550C: The following sample Cell 37 -BG-S-3-4-210302 (560-93041-1) was excessively wet for method 3550C/8270D in preparation batch 280-529681 .

Method 3546: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: Cell 37 -BG-S-3-4-210302 (560-93041-1) and Cell 33 -BG-S-3-4-210302 (560-93041-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 37 -BG-S-3-4-210302 Lab Sample ID: 560-93041-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.08		0.856	0.342	mg/Kg	2		6020	Total/NA
Barium	37.4		1.71	0.428	mg/Kg	2		6020	Total/NA
Beryllium	0.319		0.0856	0.0342	mg/Kg	2		6020	Total/NA
Cadmium	0.0289	J	0.0428	0.0205	mg/Kg	2		6020	Total/NA
Chromium	5.08		0.856	0.385	mg/Kg	2		6020	Total/NA
Iron	5330		10.3	5.13	mg/Kg	2		6020	Total/NA
Copper	1.97		0.856	0.342	mg/Kg	2		6020	Total/NA
Manganese	38.8		0.428	0.171	mg/Kg	2		6020	Total/NA
Lead	4.50		0.257	0.107	mg/Kg	2		6020	Total/NA
Selenium	0.279	J	0.428	0.274	mg/Kg	2		6020	Total/NA
Zinc	9.72		4.28	1.71	mg/Kg	2		6020	Total/NA
Uranium	0.126		0.0856	0.0342	mg/Kg	2		6020	Total/NA
Mercury	0.0228	J b	0.0303	0.0101	mg/Kg	1		7471A	Total/NA
pH	8.2	HF	0.1	0.1	SU	1		9045D	Total/NA
Nitrite as N	3.28	J b	4.89	0.848	mg/Kg	1		9056A	Soluble
Fluoride	2.98		0.489	0.326	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	3.28	J b	4.89	0.270	mg/Kg	1		9056A	Soluble
Sulfate	18.0		9.78	3.80	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	370		12.5	12.5	mg/L	1		SM 2540C	7 Day Leach

Client Sample ID: Cell 33 -BG-S-3-4-210302 Lab Sample ID: 560-93041-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.98		0.960	0.384	mg/Kg	2		6020	Total/NA
Barium	46.2		1.92	0.480	mg/Kg	2		6020	Total/NA
Beryllium	0.298		0.0960	0.0384	mg/Kg	2		6020	Total/NA
Cadmium	0.0392	J	0.0480	0.0230	mg/Kg	2		6020	Total/NA
Chromium	4.93		0.960	0.432	mg/Kg	2		6020	Total/NA
Iron	4900		11.5	5.76	mg/Kg	2		6020	Total/NA
Copper	1.86		0.960	0.384	mg/Kg	2		6020	Total/NA
Manganese	39.2		0.480	0.192	mg/Kg	2		6020	Total/NA
Lead	4.20		0.288	0.120	mg/Kg	2		6020	Total/NA
Zinc	8.67		4.80	1.92	mg/Kg	2		6020	Total/NA
Uranium	0.156		0.0960	0.0384	mg/Kg	2		6020	Total/NA
Mercury	0.0237	J b	0.0310	0.0103	mg/Kg	1		7471A	Total/NA
pH	8.2	HF	0.1	0.1	SU	1		9045D	Total/NA
Phenols, Total	0.429	J	1.00	0.338	mg/Kg	1		9065	Total/NA
Chloride	5.94	J	9.91	4.89	mg/Kg	1		9056A	Soluble
Nitrite as N	1.39	J b	4.96	0.859	mg/Kg	1		9056A	Soluble
Fluoride	3.57		0.496	0.331	mg/Kg	1		9056A	Soluble
Nitrate as N	2.16	J	4.96	1.39	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	3.55	J b	4.96	0.274	mg/Kg	1		9056A	Soluble
Sulfate	23.6		9.91	3.86	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	270		10.0	10.0	mg/L	1		SM 2540C	7 Day Leach

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Corpus Christi

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 37 -BG-S-3-4-210302 **Lab Sample ID: 560-93041-1**
Date Collected: 03/04/21 15:20 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.729	U	4.99	0.729	ug/Kg			03/08/21 15:15	1
Chloromethane	1.20	U	4.99	1.20	ug/Kg			03/08/21 15:15	1
Vinyl chloride	0.599	U	4.99	0.599	ug/Kg			03/08/21 15:15	1
Bromomethane	1.10	U	4.99	1.10	ug/Kg			03/08/21 15:15	1
Trichlorofluoromethane	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
Acrolein	8.58	U	49.9	8.58	ug/Kg			03/08/21 15:15	1
1,1-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
trans-1,2-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
Methyl tert-butyl ether	0.609	U	4.99	0.609	ug/Kg			03/08/21 15:15	1
1,3-Dichlorobenzene	0.309	U	4.99	0.309	ug/Kg			03/08/21 15:15	1
Methylene Chloride	4.99	U	25.0	4.99	ug/Kg			03/08/21 15:15	1
Acrylonitrile	3.59	U	49.9	3.59	ug/Kg			03/08/21 15:15	1
cis-1,2-Dichloroethene	0.569	U	4.99	0.569	ug/Kg			03/08/21 15:15	1
Carbon tetrachloride	0.509	U	4.99	0.509	ug/Kg			03/08/21 15:15	1
Benzene	0.629	U	4.99	0.629	ug/Kg			03/08/21 15:15	1
1,2-Dichloroethane	0.519	U	4.99	0.519	ug/Kg			03/08/21 15:15	1
Trichloroethene	0.279	U	4.99	0.279	ug/Kg			03/08/21 15:15	1
1,1,1-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
1,1-Dichloroethane	0.589	U	4.99	0.589	ug/Kg			03/08/21 15:15	1
1,2-Dichloropropane	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
1,4-Dioxane	19.0	U	99.8	19.0	ug/Kg			03/08/21 15:15	1
Chloroform	0.868	U	4.99	0.868	ug/Kg			03/08/21 15:15	1
Bromodichloromethane	0.200	U	4.99	0.200	ug/Kg			03/08/21 15:15	1
1,1-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/08/21 15:15	1
cis-1,3-Dichloropropene	0.449	U	4.99	0.449	ug/Kg			03/08/21 15:15	1
Toluene	0.898	U	4.99	0.898	ug/Kg			03/08/21 15:15	1
trans-1,3-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/08/21 15:15	1
1,1,2-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
Tetrachloroethene	0.739	U	4.99	0.739	ug/Kg			03/08/21 15:15	1
1,3-Dichloropropene, Total	0.519	U	4.99	0.519	ug/Kg			03/08/21 15:15	1
1,2-Dibromoethane	0.299	U	4.99	0.299	ug/Kg			03/08/21 15:15	1
Monochlorobenzene	0.299	U	4.99	0.299	ug/Kg			03/08/21 15:15	1
Ethylbenzene	0.449	U	4.99	0.449	ug/Kg			03/08/21 15:15	1
Xylenes, Total	0.499	U	9.98	0.499	ug/Kg			03/08/21 15:15	1
Styrene	0.299	U	4.99	0.299	ug/Kg			03/08/21 15:15	1
Tribromomethane	0.509	U	4.99	0.509	ug/Kg			03/08/21 15:15	1
1,1,2,2-Tetrachloroethane	0.379	U	4.99	0.379	ug/Kg			03/08/21 15:15	1
1,4-Dichlorobenzene	0.319	U	4.99	0.319	ug/Kg			03/08/21 15:15	1
1,2-Dichlorobenzene	0.250	U	4.99	0.250	ug/Kg			03/08/21 15:15	1
1,2,4-Trichlorobenzene	0.968	U	4.99	0.968	ug/Kg			03/08/21 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*65 - 152*		*03/08/21 15:15*	*1*
Toluene-d8 (Surr)	*99*		*65 - 139*		*03/08/21 15:15*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	12.0	U	65.9	12.0	ug/Kg		03/16/21 09:20	03/17/21 19:56	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 37 -BG-S-3-4-210302 **Lab Sample ID: 560-93041-1**
Date Collected: 03/04/21 15:20 **Matrix: Solid**
Date Received: 03/05/21 11:48

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	97		30 - 164	03/16/21 09:20	03/17/21 19:56	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U H	0.330	0.0103	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Acenaphthylene	0.0821	U H *	0.330	0.0821	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Anthracene	0.0170	U H	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzidine	0.990	U H	3.30	0.990	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzo[a]anthracene	0.0200	U H	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzo[b]fluoranthene	0.0262	U H	0.330	0.0262	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzo[k]fluoranthene	0.0400	U H	0.330	0.0400	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzo[g,h,i]perylene	0.0160	U H	0.330	0.0160	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzo[a]pyrene	0.0200	U H	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Bis(2-chloroethyl)ether	0.0166	U H *	0.330	0.0166	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Di (2-ethylhexyl)phthalate	0.0460	U H	0.330	0.0460	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Chrysene	0.0270	U H	0.330	0.0270	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dibenz(a,h)anthracene	0.0190	U H	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dichlorobenzidine, 3,3'-	0.0900	U H	0.660	0.0900	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Diethyl phthalate	0.0260	U H *	0.660	0.0260	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dimethyl phthalate	0.0230	U H	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dibutylphthalate	0.0290	U H	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
2,4-Dinitrotoluene	0.0660	U H	0.330	0.0660	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
2,6-Dinitrotoluene	0.0280	U H *	0.330	0.0280	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U H	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Fluoranthene	0.0360	U H	0.330	0.0360	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Fluorene	0.0180	U H *	0.330	0.0180	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Hexachlorobenzene	0.0290	U H	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Hexachlorobutadiene	0.0100	U H	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Hexachlorocyclopentadiene	0.111	U H	1.60	0.111	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Hexachloroethane	0.0213	U H *	0.330	0.0213	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Indeno[1,2,3-cd]pyrene	0.0220	U H	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Isophorone	0.0170	U H	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
1-Methylnaphthalene	0.0112	U H	0.330	0.0112	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
2-Methylnaphthalene	0.0190	U H *	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Naphthalene	0.0310	U H *	0.330	0.0310	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Nitrobenzene	0.0220	U H	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
N-Nitrosodi-n-butylamine	0.0967	U H	0.330	0.0967	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
N-Nitrosodiethylamine	0.0650	U H	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
N-Nitrosodimethylamine	0.0370	U H	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
N-Nitrosodiphenylamine	0.0210	U H	0.330	0.0210	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
N-Nitrosopyrrolidine	0.0640	U H	0.330	0.0640	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Pentachlorobenzene	0.0650	U H	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Phenanthrene	0.0170	U H	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Pyrene	0.0121	U H	0.330	0.0121	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
1,2,4,5-Tetrachlorobenzene	0.0490	U H	0.330	0.0490	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
2,4-Dichlorophenol	0.0100	U H *	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dinitrophenols	0.333	U H	1.60	0.333	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dinitro-o-cresol	0.330	U H	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Pentachlorophenol	0.330	U H	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 13:24	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 37 -BG-S-3-4-210302 **Lab Sample ID: 560-93041-1**
Date Collected: 03/04/21 15:20 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.0100	U H	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
2,4,5-Trichlorophenol	0.0100	U H	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Atrazine	0.0370	U H	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
bis (2-chloroisopropyl) ether	0.0230	U H	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*55*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*
2-Fluorobiphenyl	*55*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*
Terphenyl-d14	*83*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*
Phenol-d5 (Surr)	*58*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*
2-Fluorophenol	*57*		*43 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*
2,4,6-Tribromophenol	*77*		*35 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0648	U	0.101	0.0648	mg/Kg		03/11/21 09:04	03/11/21 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*72*		*20 - 140*	*03/11/21 09:04*	*03/11/21 16:56*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.5	U	48.4	33.5	mg/Kg		03/12/21 07:33	03/16/21 18:14	1
C28-C36	33.5	U	48.4	33.5	mg/Kg		03/12/21 07:33	03/16/21 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*39 - 120*	*03/12/21 07:33*	*03/16/21 18:14*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.907	U	4.99	0.907	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Hexachlorocyclohexane, gamma-	1.78	U	4.99	1.78	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Hexachlorocyclohexane, beta-	1.72	U	4.99	1.72	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Hexachlorocyclohexane, delta-	1.68	U	4.99	1.68	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Heptachlor	1.58	U	4.99	1.58	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Aldrin	0.768	U	4.99	0.768	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Heptachlor epoxide	1.44	U	4.99	1.44	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Endosulfan I	1.20	U	4.99	1.20	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Dieldrin	1.10	U	4.99	1.10	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Endrin	1.89	U	4.99	1.89	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Endosulfan II	1.48	U	4.99	1.48	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
DDT	1.13	U	4.99	1.13	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Endrin aldehyde	1.31	U	4.99	1.31	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Endosulfan sulfate	1.28	U *	4.99	1.28	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Chlordane (technical)	12.0	U	49.9	12.0	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Toxaphene	24.9	U	99.7	24.9	ug/Kg		03/11/21 08:26	03/15/21 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*30 - 120*	*03/11/21 08:26*	*03/15/21 20:10*	*1*
DCB Decachlorobiphenyl	*85*		*13 - 135*	*03/11/21 08:26*	*03/15/21 20:10*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 37 -BG-S-3-4-210302 **Lab Sample ID: 560-93041-1**
Date Collected: 03/04/21 15:20 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1221	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1232	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1242	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1248	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1254	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1260	0.0101	U	0.0332	0.0101	mg/Kg		03/19/21 07:31	03/19/21 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*32 - 132*	*03/19/21 07:31*	*03/19/21 18:40*	*1*
DCB Decachlorobiphenyl	*75*		*57 - 138*	*03/19/21 07:31*	*03/19/21 18:40*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0207	U	0.0912	0.0207	mg/Kg		03/16/21 15:34	03/18/21 08:19	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0392	U	0.182	0.0392	mg/Kg		03/16/21 15:34	03/18/21 08:19	1
2,4,6-Trinitrotoluene	0.0280	U	0.0912	0.0280	mg/Kg		03/16/21 15:34	03/18/21 08:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*		*83 - 122*	*03/16/21 15:34*	*03/18/21 08:19*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0822	U	0.499	0.0822	ug/Kg		03/11/21 12:20	03/12/21 21:09	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.218	U	0.759	0.218	ug/Kg		03/16/21 13:05	04/01/21 12:44	1
Perfluorohexanesulfonic acid (PFHxS)	0.266	U	0.759	0.266	ug/Kg		03/16/21 13:05	04/01/21 12:44	1
Perfluorooctanesulfonic acid (PFOS)	0.133	U	0.759	0.133	ug/Kg		03/16/21 13:05	04/01/21 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*99*		*57 - 153*	*03/16/21 13:05*	*04/01/21 12:44*	*1*
13C8 PFOS	*105*		*70 - 130*	*03/16/21 13:05*	*04/01/21 12:44*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0642	U	0.171	0.0642	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Arsenic	**2.08**		0.856	0.342	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Barium	**37.4**		1.71	0.428	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Beryllium	**0.319**		0.0856	0.0342	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Cadmium	**0.0289**	**J**	0.0428	0.0205	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Chromium	**5.08**		0.856	0.385	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Iron	**5330**		10.3	5.13	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Copper	**1.97**		0.856	0.342	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Manganese	**38.8**		0.428	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Lead	**4.50**		0.257	0.107	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Antimony	0.171	U	0.428	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Selenium	**0.279**	**J**	0.428	0.274	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Thallium	0.171	U	0.428	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:22	2

Eurofins Xenco, Corpus Christi

Released to Imaging: 5/27/2022 3:16:29 PM

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 37 -BG-S-3-4-210302 Lab Sample ID: 560-93041-1

Date Collected: 03/04/21 15:20 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	9.72		4.28	1.71	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Uranium	0.126		0.0856	0.0342	mg/Kg		03/11/21 10:09	03/17/21 18:22	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0228	J b	0.0303	0.0101	mg/Kg		03/24/21 17:28	03/24/21 21:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.216	U	0.568	0.216	mg/Kg		03/15/21 18:53	03/15/21 21:31	1
pH	8.2	HF	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.82	U	9.78	4.82	mg/Kg			03/18/21 17:24	1
Nitrite as N	3.28	J b	4.89	0.848	mg/Kg			03/18/21 17:24	1
Fluoride	2.98		0.489	0.326	mg/Kg			03/18/21 17:24	1
Nitrate as N	1.38	U	4.89	1.38	mg/Kg			03/18/21 17:24	1
Nitrate Nitrite as N	3.28	J b	4.89	0.270	mg/Kg			03/18/21 17:24	1
Sulfate	18.0		9.78	3.80	mg/Kg			03/18/21 17:24	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		12.5	12.5	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.366		0.135	0.141	1.00	0.126	pCi/g	03/12/21 13:14	04/02/21 06:39	1
Radium-228	0.305		0.244	0.246		0.290	pCi/g	03/12/21 13:14	04/02/21 06:39	1
Combined Radium 226 + 228	0.671		0.279	0.284		0.290	pCi/g	03/12/21 13:14	04/02/21 06:39	1

Client Sample ID: Cell 33 -BG-S-3-4-210302 Lab Sample ID: 560-93041-2

Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.726	U	4.97	0.726	ug/Kg			03/08/21 14:50	1
Chloromethane	1.19	U	4.97	1.19	ug/Kg			03/08/21 14:50	1
Vinyl chloride	0.596	U	4.97	0.596	ug/Kg			03/08/21 14:50	1
Bromomethane	1.09	U	4.97	1.09	ug/Kg			03/08/21 14:50	1
Trichlorofluoromethane	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
Acrolein	8.55	U	49.7	8.55	ug/Kg			03/08/21 14:50	1
1,1-Dichloroethene	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
trans-1,2-Dichloroethene	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
Methyl tert-butyl ether	0.606	U	4.97	0.606	ug/Kg			03/08/21 14:50	1
1,3-Dichlorobenzene	0.308	U	4.97	0.308	ug/Kg			03/08/21 14:50	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 33 -BG-S-3-4-210302 **Lab Sample ID: 560-93041-2**
Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	4.97	U	24.9	4.97	ug/Kg			03/08/21 14:50	1
Acrylonitrile	3.58	U	49.7	3.58	ug/Kg			03/08/21 14:50	1
cis-1,2-Dichloroethene	0.567	U	4.97	0.567	ug/Kg			03/08/21 14:50	1
Carbon tetrachloride	0.507	U	4.97	0.507	ug/Kg			03/08/21 14:50	1
Benzene	0.626	U	4.97	0.626	ug/Kg			03/08/21 14:50	1
1,2-Dichloroethane	0.517	U	4.97	0.517	ug/Kg			03/08/21 14:50	1
Trichloroethene	0.278	U	4.97	0.278	ug/Kg			03/08/21 14:50	1
1,1,1-Trichloroethane	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
1,1-Dichloroethane	0.586	U	4.97	0.586	ug/Kg			03/08/21 14:50	1
1,2-Dichloropropane	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
1,4-Dioxane	18.9	U	99.4	18.9	ug/Kg			03/08/21 14:50	1
Chloroform	0.865	U	4.97	0.865	ug/Kg			03/08/21 14:50	1
Bromodichloromethane	0.199	U	4.97	0.199	ug/Kg			03/08/21 14:50	1
1,1-Dichloropropene	0.517	U	4.97	0.517	ug/Kg			03/08/21 14:50	1
cis-1,3-Dichloropropene	0.447	U	4.97	0.447	ug/Kg			03/08/21 14:50	1
Toluene	0.895	U	4.97	0.895	ug/Kg			03/08/21 14:50	1
trans-1,3-Dichloropropene	0.517	U	4.97	0.517	ug/Kg			03/08/21 14:50	1
1,1,2-Trichloroethane	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
Tetrachloroethene	0.736	U	4.97	0.736	ug/Kg			03/08/21 14:50	1
1,3-Dichloropropene, Total	0.517	U	4.97	0.517	ug/Kg			03/08/21 14:50	1
1,2-Dibromoethane	0.298	U	4.97	0.298	ug/Kg			03/08/21 14:50	1
Monochlorobenzene	0.298	U	4.97	0.298	ug/Kg			03/08/21 14:50	1
Ethylbenzene	0.447	U	4.97	0.447	ug/Kg			03/08/21 14:50	1
Xylenes, Total	0.497	U	9.94	0.497	ug/Kg			03/08/21 14:50	1
Styrene	0.298	U	4.97	0.298	ug/Kg			03/08/21 14:50	1
Tribromomethane	0.507	U	4.97	0.507	ug/Kg			03/08/21 14:50	1
1,1,2,2-Tetrachloroethane	0.378	U	4.97	0.378	ug/Kg			03/08/21 14:50	1
1,4-Dichlorobenzene	0.318	U	4.97	0.318	ug/Kg			03/08/21 14:50	1
1,2-Dichlorobenzene	0.249	U	4.97	0.249	ug/Kg			03/08/21 14:50	1
1,2,4-Trichlorobenzene	0.964	U	4.97	0.964	ug/Kg			03/08/21 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*65 - 152*		*03/08/21 14:50*	*1*
Toluene-d8 (Surr)	*100*		*65 - 139*		*03/08/21 14:50*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.6	11.9	ug/Kg		03/16/21 09:20	03/17/21 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*98*		*30 - 164*	*03/16/21 09:20*	*03/17/21 20:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U H	0.329	0.0103	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Acenaphthylene	0.0818	U H *	0.329	0.0818	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Anthracene	0.0169	U H	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Benzidine	0.987	U H	3.29	0.987	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Benzo[a]anthracene	0.0199	U H	0.329	0.0199	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Benzo[b]fluoranthene	0.0261	U H	0.329	0.0261	mg/Kg		03/19/21 11:14	04/07/21 13:51	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 33 -BG-S-3-4-210302 **Lab Sample ID: 560-93041-2**
Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.0399	U H	0.329	0.0399	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Benzo[g,h,i]perylene	0.0159	U H	0.329	0.0159	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Benzo[a]pyrene	0.0199	U H	0.329	0.0199	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Bis(2-chloroethyl)ether	0.0165	U H *	0.329	0.0165	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Di (2-ethylhexyl)phthalate	0.0458	U H	0.329	0.0458	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Chrysene	0.0269	U H	0.329	0.0269	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dibenz(a,h)anthracene	0.0189	U H	0.329	0.0189	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dichlorobenzidine, 3,3'-	0.0897	U H	0.658	0.0897	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Diethyl phthalate	0.0259	U H *	0.658	0.0259	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dimethyl phthalate	0.0229	U H	0.329	0.0229	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dibutylphthalate	0.0289	U H	0.329	0.0289	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2,4-Dinitrotoluene	0.0658	U H	0.329	0.0658	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2,6-Dinitrotoluene	0.0279	U H *	0.329	0.0279	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0219	U H	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Fluoranthene	0.0359	U H	0.329	0.0359	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Fluorene	0.0179	U H *	0.329	0.0179	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Hexachlorobenzene	0.0289	U H	0.329	0.0289	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Hexachlorobutadiene	0.00997	U H	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Hexachlorocyclopentadiene	0.111	U H	1.59	0.111	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Hexachloroethane	0.0212	U H *	0.329	0.0212	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Indeno[1,2,3-cd]pyrene	0.0219	U H	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Isophorone	0.0169	U H	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
1-Methylnaphthalene	0.0112	U H	0.329	0.0112	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2-Methylnaphthalene	0.0189	U H *	0.329	0.0189	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Naphthalene	0.0309	U H *	0.329	0.0309	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Nitrobenzene	0.0219	U H	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
N-Nitrosodi-n-butylamine	0.0964	U H	0.329	0.0964	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
N-Nitrosodiethylamine	0.0648	U H	0.329	0.0648	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
N-Nitrosodimethylamine	0.0369	U H	0.329	0.0369	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
N-Nitrosodiphenylamine	0.0209	U H	0.329	0.0209	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
N-Nitrosopyrrolidine	0.0638	U H	0.329	0.0638	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Pentachlorobenzene	0.0648	U H	0.329	0.0648	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Phenanthrene	0.0169	U H	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Pyrene	0.0121	U H	0.329	0.0121	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
1,2,4,5-Tetrachlorobenzene	0.0488	U H	0.329	0.0488	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2,4-Dichlorophenol	0.00997	U H *	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dinitrophenols	0.332	U H	1.59	0.332	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dinitro-o-cresol	0.329	U H	1.59	0.329	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Pentachlorophenol	0.329	U H	1.59	0.329	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2,4,6-Trichlorophenol	0.00997	U H	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2,4,5-Trichlorophenol	0.00997	U H	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Atrazine	0.0369	U H	0.329	0.0369	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
bis (2-chloroisopropyl) ether	0.0229	U H	0.329	0.0229	mg/Kg		03/19/21 11:14	04/07/21 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*48*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:51*	*1*
2-Fluorobiphenyl	*52*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:51*	*1*
Terphenyl-d14	*79*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:51*	*1*
Phenol-d5 (Surr)	*51*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:51*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 33 -BG-S-3-4-210302 **Lab Sample ID: 560-93041-2**
Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	51		43 - 120	03/19/21 11:14	04/07/21 13:51	1
2,4,6-Tribromophenol	74		35 - 120	03/19/21 11:14	04/07/21 13:51	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0634	U	0.0988	0.0634	mg/Kg		03/11/21 09:04	03/11/21 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	97		20 - 140	03/11/21 09:04	03/11/21 17:32	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.9	U	49.1	33.9	mg/Kg		03/12/21 07:33	03/16/21 18:41	1
C28-C36	33.9	U	49.1	33.9	mg/Kg		03/12/21 07:33	03/16/21 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	82		39 - 120	03/12/21 07:33	03/16/21 18:41	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.928	U	5.10	0.928	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Hexachlorocyclohexane, gamma-	1.82	U	5.10	1.82	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Hexachlorocyclohexane, beta-	1.76	U	5.10	1.76	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Hexachlorocyclohexane, delta-	1.72	U	5.10	1.72	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Heptachlor	1.61	U	5.10	1.61	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Aldrin	0.785	U	5.10	0.785	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Heptachlor epoxide	1.47	U	5.10	1.47	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Endosulfan I	1.22	U	5.10	1.22	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Dieldrin	1.12	U	5.10	1.12	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Endrin	1.94	U	5.10	1.94	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Endosulfan II	1.51	U	5.10	1.51	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
DDT	1.15	U	5.10	1.15	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Endrin aldehyde	1.34	U	5.10	1.34	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Endosulfan sulfate	1.30	U *	5.10	1.30	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Chlordane (technical)	12.2	U	51.0	12.2	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Toxaphene	25.5	U	102	25.5	ug/Kg		03/11/21 08:26	03/15/21 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	77		30 - 120	03/11/21 08:26	03/15/21 20:23	1
DCB Decachlorobiphenyl	83		13 - 135	03/11/21 08:26	03/15/21 20:23	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1221	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1232	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1242	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1248	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1254	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1260	0.00980	U	0.0323	0.00980	mg/Kg		03/19/21 07:31	03/19/21 19:00	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 33 -BG-S-3-4-210302 Lab Sample ID: 560-93041-2

Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*94*		*32 - 132*	*03/19/21 07:31*	*03/19/21 19:00*	*1*
DCB Decachlorobiphenyl	*85*		*57 - 138*	*03/19/21 07:31*	*03/19/21 19:00*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0209	U	0.0923	0.0209	mg/Kg		03/16/21 15:34	03/18/21 08:42	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0397	U	0.185	0.0397	mg/Kg		03/16/21 15:34	03/18/21 08:42	1
2,4,6-Trinitrotoluene	0.0283	U	0.0923	0.0283	mg/Kg		03/16/21 15:34	03/18/21 08:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 08:42*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0800	U	0.485	0.0800	ug/Kg		03/11/21 12:20	03/12/21 21:15	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.216	U	0.753	0.216	ug/Kg		03/16/21 13:05	04/01/21 12:53	1
Perfluorohexanesulfonic acid (PFHxS)	0.263	U	0.753	0.263	ug/Kg		03/16/21 13:05	04/01/21 12:53	1
Perfluorooctanesulfonic acid (PFOS)	0.132	U	0.753	0.132	ug/Kg		03/16/21 13:05	04/01/21 12:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 12:53*	*1*
13C8 PFOS	*106*		*70 - 130*	*03/16/21 13:05*	*04/01/21 12:53*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0720	U	0.192	0.0720	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Arsenic	**1.98**		0.960	0.384	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Barium	**46.2**		1.92	0.480	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Beryllium	**0.298**		0.0960	0.0384	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Cadmium	**0.0392**	**J**	0.0480	0.0230	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Chromium	**4.93**		0.960	0.432	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Iron	**4900**		11.5	5.76	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Copper	**1.86**		0.960	0.384	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Manganese	**39.2**		0.480	0.192	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Lead	**4.20**		0.288	0.120	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Antimony	0.192	U	0.480	0.192	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Selenium	0.307	U	0.480	0.307	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Thallium	0.192	U	0.480	0.192	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Zinc	**8.67**		4.80	1.92	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Uranium	**0.156**		0.0960	0.0384	mg/Kg		03/11/21 10:09	03/17/21 18:25	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0237**	**J b**	0.0310	0.0103	mg/Kg		03/24/21 17:28	03/24/21 21:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.207	U	0.543	0.207	mg/Kg		03/15/21 18:53	03/15/21 21:33	1

Eurofins Xenco, Corpus Christi

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: Cell 33 -BG-S-3-4-210302 **Lab Sample ID: 560-93041-2**
Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2	HF	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	0.429	J	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.94	J	9.91	4.89	mg/Kg			03/18/21 17:46	1
Nitrite as N	1.39	J b	4.96	0.859	mg/Kg			03/18/21 17:46	1
Fluoride	3.57		0.496	0.331	mg/Kg			03/18/21 17:46	1
Nitrate as N	2.16	J	4.96	1.39	mg/Kg			03/18/21 17:46	1
Nitrate Nitrite as N	3.55	J b	4.96	0.274	mg/Kg			03/18/21 17:46	1
Sulfate	23.6		9.91	3.86	mg/Kg			03/18/21 17:46	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	270		10.0	10.0	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.297		0.140	0.144	1.00	0.165	pCi/g	03/12/21 13:14	04/02/21 06:42	1
Radium-228	0.324	U	0.284	0.285		0.365	pCi/g	03/12/21 13:14	04/02/21 06:42	1
Combined Radium 226 + 228	0.621		0.317	0.319		0.365	pCi/g	03/12/21 13:14	04/02/21 06:42	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 560-183369/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.730	U	5.00	0.730	ug/Kg			03/08/21 12:17	1
Chloromethane	1.20	U	5.00	1.20	ug/Kg			03/08/21 12:17	1
Vinyl chloride	0.600	U	5.00	0.600	ug/Kg			03/08/21 12:17	1
Bromomethane	1.10	U	5.00	1.10	ug/Kg			03/08/21 12:17	1
Trichlorofluoromethane	0.500	U	5.00	0.500	ug/Kg			03/08/21 12:17	1
Acrolein	8.60	U	50.0	8.60	ug/Kg			03/08/21 12:17	1
1,1-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/08/21 12:17	1
trans-1,2-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/08/21 12:17	1
Methyl tert-butyl ether	0.610	U	5.00	0.610	ug/Kg			03/08/21 12:17	1
1,3-Dichlorobenzene	0.310	U	5.00	0.310	ug/Kg			03/08/21 12:17	1
Methylene Chloride	5.00	U	25.0	5.00	ug/Kg			03/08/21 12:17	1
Acrylonitrile	3.60	U	50.0	3.60	ug/Kg			03/08/21 12:17	1
cis-1,2-Dichloroethene	0.570	U	5.00	0.570	ug/Kg			03/08/21 12:17	1
Carbon tetrachloride	0.510	U	5.00	0.510	ug/Kg			03/08/21 12:17	1
Benzene	0.630	U	5.00	0.630	ug/Kg			03/08/21 12:17	1
1,2-Dichloroethane	0.520	U	5.00	0.520	ug/Kg			03/08/21 12:17	1
Trichloroethene	0.280	U	5.00	0.280	ug/Kg			03/08/21 12:17	1
1,1,1-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/08/21 12:17	1
1,1-Dichloroethane	0.590	U	5.00	0.590	ug/Kg			03/08/21 12:17	1
1,2-Dichloropropane	0.500	U	5.00	0.500	ug/Kg			03/08/21 12:17	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/08/21 12:17	1
Chloroform	0.870	U	5.00	0.870	ug/Kg			03/08/21 12:17	1
Bromodichloromethane	0.200	U	5.00	0.200	ug/Kg			03/08/21 12:17	1
1,1-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/08/21 12:17	1
cis-1,3-Dichloropropene	0.450	U	5.00	0.450	ug/Kg			03/08/21 12:17	1
Toluene	0.900	U	5.00	0.900	ug/Kg			03/08/21 12:17	1
trans-1,3-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/08/21 12:17	1
1,1,2-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/08/21 12:17	1
Tetrachloroethene	0.740	U	5.00	0.740	ug/Kg			03/08/21 12:17	1
1,3-Dichloropropene, Total	0.520	U	5.00	0.520	ug/Kg			03/08/21 12:17	1
1,2-Dibromoethane	0.300	U	5.00	0.300	ug/Kg			03/08/21 12:17	1
Monochlorobenzene	0.300	U	5.00	0.300	ug/Kg			03/08/21 12:17	1
Ethylbenzene	0.450	U	5.00	0.450	ug/Kg			03/08/21 12:17	1
Xylenes, Total	0.500	U	10.0	0.500	ug/Kg			03/08/21 12:17	1
Styrene	0.300	U	5.00	0.300	ug/Kg			03/08/21 12:17	1
Tribromomethane	0.510	U	5.00	0.510	ug/Kg			03/08/21 12:17	1
1,1,2,2-Tetrachloroethane	0.380	U	5.00	0.380	ug/Kg			03/08/21 12:17	1
1,4-Dichlorobenzene	0.320	U	5.00	0.320	ug/Kg			03/08/21 12:17	1
1,2-Dichlorobenzene	0.250	U	5.00	0.250	ug/Kg			03/08/21 12:17	1
1,2,4-Trichlorobenzene	0.970	U	5.00	0.970	ug/Kg			03/08/21 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*65 - 152*		*03/08/21 12:17*	*1*
Toluene-d8 (Surr)	*99*		*65 - 139*		*03/08/21 12:17*	*1*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 560-183369/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183369

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	40.0	38.12		ug/Kg		95	13 - 130
Chloromethane	40.0	41.43		ug/Kg		104	61 - 137
Vinyl chloride	40.0	42.53		ug/Kg		106	65 - 139
Bromomethane	40.0	46.75		ug/Kg		117	57 - 155
Trichlorofluoromethane	40.0	47.26		ug/Kg		118	68 - 146
Acrolein	395	405.6		ug/Kg		103	20 - 150
1,1-Dichloroethene	40.0	46.02		ug/Kg		115	70 - 130
trans-1,2-Dichloroethene	40.0	44.20		ug/Kg		111	70 - 132
Methyl tert-butyl ether	40.0	43.57		ug/Kg		109	70 - 130
1,3-Dichlorobenzene	40.0	44.87		ug/Kg		112	70 - 130
Methylene Chloride	40.0	42.41		ug/Kg		106	61 - 150
Acrylonitrile	400	423.7		ug/Kg		106	66 - 137
cis-1,2-Dichloroethene	40.0	45.41		ug/Kg		114	70 - 130
Carbon tetrachloride	40.0	50.84		ug/Kg		127	70 - 136
Benzene	40.0	42.68		ug/Kg		107	70 - 131
1,2-Dichloroethane	40.0	44.89		ug/Kg		112	70 - 130
Trichloroethene	40.0	46.39		ug/Kg		116	70 - 130
1,1,1-Trichloroethane	40.0	47.97		ug/Kg		120	70 - 132
1,1-Dichloroethane	40.0	43.04		ug/Kg		108	70 - 130
1,2-Dichloropropane	40.0	40.96		ug/Kg		102	70 - 130
1,4-Dioxane	800	879.3		ug/Kg		110	10 - 150
Chloroform	40.0	44.73		ug/Kg		112	70 - 130
Bromodichloromethane	40.0	47.76		ug/Kg		119	70 - 130
1,1-Dichloropropene	40.0	45.35		ug/Kg		113	70 - 130
cis-1,3-Dichloropropene	40.0	45.40		ug/Kg		113	70 - 130
Toluene	40.0	42.46		ug/Kg		106	70 - 130
trans-1,3-Dichloropropene	40.0	44.46		ug/Kg		111	70 - 131
1,1,2-Trichloroethane	40.0	42.38		ug/Kg		106	70 - 130
Tetrachloroethene	40.0	49.69		ug/Kg		124	70 - 130
1,3-Dichloropropene, Total	80.0	89.86		ug/Kg		112	
1,2-Dibromoethane	40.0	44.21		ug/Kg		111	70 - 130
Monochlorobenzene	40.0	44.24		ug/Kg		111	70 - 130
Ethylbenzene	40.0	44.87		ug/Kg		112	70 - 130
Xylenes, Total	80.0	92.75		ug/Kg		116	70 - 130
Styrene	40.0	48.62		ug/Kg		122	70 - 130
Tribromomethane	40.0	43.72		ug/Kg		109	59 - 137
1,1,2,2-Tetrachloroethane	40.0	42.18		ug/Kg		105	70 - 130
1,4-Dichlorobenzene	40.0	44.21		ug/Kg		111	70 - 130
1,2-Dichlorobenzene	40.0	43.02		ug/Kg		108	70 - 130
1,2,4-Trichlorobenzene	40.0	50.25		ug/Kg		126	68 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*65 - 152*
Toluene-d8 (Surr)	*99*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 560-183369/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183369

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			40.0	35.68		ug/Kg		89	13 - 130	7	30.0
Chloromethane			40.0	39.03		ug/Kg		98	61 - 137	6	30.0
Vinyl chloride			40.0	39.61		ug/Kg		99	65 - 139	7	30.0
Bromomethane			40.0	43.75		ug/Kg		109	57 - 155	7	30.0
Trichlorofluoromethane			40.0	45.18		ug/Kg		113	68 - 146	5	30.0
Acrolein			395	384.1		ug/Kg		97	20 - 150	5	30.0
1,1-Dichloroethene			40.0	42.94		ug/Kg		107	70 - 130	7	30.0
trans-1,2-Dichloroethene			40.0	41.62		ug/Kg		104	70 - 132	6	30.0
Methyl tert-butyl ether			40.0	40.54		ug/Kg		101	70 - 130	7	30.0
1,3-Dichlorobenzene			40.0	42.09		ug/Kg		105	70 - 130	6	30.0
Methylene Chloride			40.0	40.62		ug/Kg		102	61 - 150	4	30.0
Acrylonitrile			400	406.2		ug/Kg		102	66 - 137	4	30.0
cis-1,2-Dichloroethene			40.0	44.14		ug/Kg		110	70 - 130	3	30.0
Carbon tetrachloride			40.0	49.60		ug/Kg		124	70 - 136	2	30.0
Benzene			40.0	41.60		ug/Kg		104	70 - 131	3	30.0
1,2-Dichloroethane			40.0	42.95		ug/Kg		107	70 - 130	4	30.0
Trichloroethene			40.0	44.33		ug/Kg		111	70 - 130	5	30.0
1,1,1-Trichloroethane			40.0	46.92		ug/Kg		117	70 - 132	2	30.0
1,1-Dichloroethane			40.0	41.72		ug/Kg		104	70 - 130	3	30.0
1,2-Dichloropropane			40.0	40.77		ug/Kg		102	70 - 130	0	30.0
1,4-Dioxane			800	873.5		ug/Kg		109	10 - 150	1	30.0
Chloroform			40.0	44.26		ug/Kg		111	70 - 130	1	30.0
Bromodichloromethane			40.0	47.02		ug/Kg		118	70 - 130	2	30.0
1,1-Dichloropropene			40.0	43.26		ug/Kg		108	70 - 130	5	30.0
cis-1,3-Dichloropropene			40.0	44.93		ug/Kg		112	70 - 130	1	30.0
Toluene			40.0	40.96		ug/Kg		102	70 - 130	4	30.0
trans-1,3-Dichloropropene			40.0	41.76		ug/Kg		104	70 - 131	6	30.0
1,1,2-Trichloroethane			40.0	41.75		ug/Kg		104	70 - 130	1	30.0
Tetrachloroethene			40.0	47.29		ug/Kg		118	70 - 130	5	30.0
1,3-Dichloropropene, Total			80.0	86.69		ug/Kg		108		4	30
1,2-Dibromoethane			40.0	44.00		ug/Kg		110	70 - 130	0	30.0
Monochlorobenzene			40.0	41.91		ug/Kg		105	70 - 130	5	30.0
Ethylbenzene			40.0	43.45		ug/Kg		109	70 - 130	3	30.0
Xylenes, Total			80.0	89.49		ug/Kg		112	70 - 130	4	30.0
Styrene			40.0	46.92		ug/Kg		117	70 - 130	4	30.0
Tribromomethane			40.0	44.05		ug/Kg		110	59 - 137	1	30.0
1,1,2,2-Tetrachloroethane			40.0	41.47		ug/Kg		104	70 - 130	2	30.0
1,4-Dichlorobenzene			40.0	41.69		ug/Kg		104	70 - 130	6	30.0
1,2-Dichlorobenzene			40.0	40.71		ug/Kg		102	70 - 130	6	30.0
1,2,4-Trichlorobenzene			40.0	45.41		ug/Kg		114	68 - 140	10	30.0

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*65 - 152*
Toluene-d8 (Surr)	*98*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 8270D - Pesticides by GC/MS

Lab Sample ID: MB 400-523876/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 524066 **Prep Batch: 523876**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	12.0	U	66.0	12.0	ug/Kg		03/16/21 09:18	03/17/21 16:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*104*		*30 - 164*	*03/16/21 09:18*	*03/17/21 16:37*	*1*

Lab Sample ID: LCS 400-523876/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 524066 **Prep Batch: 523876**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Prometon			333	290.2		ug/Kg		87	40 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Triphenylphosphate	*90*		*30 - 164*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-529681/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U	0.330	0.0103	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Acenaphthylene	0.0821	U	0.330	0.0821	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Anthracene	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzidine	0.990	U	3.30	0.990	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[a]anthracene	0.0200	U	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[b]fluoranthene	0.0262	U	0.330	0.0262	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[k]fluoranthene	0.0400	U	0.330	0.0400	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[g,h,i]perylene	0.0160	U	0.330	0.0160	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[a]pyrene	0.0200	U	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Bis(2-chloroethyl)ether	0.0166	U	0.330	0.0166	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Di (2-ethylhexyl)phthalate	0.0460	U	0.330	0.0460	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Chrysene	0.0270	U	0.330	0.0270	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dibenz(a,h)anthracene	0.0190	U	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dichlorobenzidine, 3,3'-	0.0900	U	0.660	0.0900	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Diethyl phthalate	0.0260	U	0.660	0.0260	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dimethyl phthalate	0.0230	U	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dibutylphthalate	0.0290	U	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4-Dinitrotoluene	0.0660	U	0.330	0.0660	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,6-Dinitrotoluene	0.0280	U	0.330	0.0280	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Fluoranthene	0.0360	U	0.330	0.0360	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Fluorene	0.0180	U	0.330	0.0180	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Hexachlorobenzene	0.0290	U	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Hexachlorobutadiene	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Hexachlorocyclopentadiene	0.111	U	1.60	0.111	mg/Kg		03/19/21 11:14	04/07/21 12:31	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-529681/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	0.0213	U	0.330	0.0213	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Indeno[1,2,3-cd]pyrene	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Isophorone	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
1-Methylnaphthalene	0.0112	U	0.330	0.0112	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2-Methylnaphthalene	0.0190	U	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Naphthalene	0.0310	U	0.330	0.0310	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Nitrobenzene	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodi-n-butylamine	0.0967	U	0.330	0.0967	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodiethylamine	0.0650	U	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodimethylamine	0.0370	U	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodiphenylamine	0.0210	U	0.330	0.0210	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosopyrrolidine	0.0640	U	0.330	0.0640	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Pentachlorobenzene	0.0650	U	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Phenanthrene	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Pyrene	0.0121	U	0.330	0.0121	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
1,2,4,5-Tetrachlorobenzene	0.0490	U	0.330	0.0490	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4-Dichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dinitrophenols	0.333	U	1.60	0.333	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dinitro-o-cresol	0.330	U	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Pentachlorophenol	0.330	U	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4,6-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4,5-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Atrazine	0.0370	U	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
bis (2-chloroisopropyl) ether	0.0230	U	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*37*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
2-Fluorobiphenyl	*41*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
Terphenyl-d14	*76*		*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
Phenol-d5 (Surr)	*41*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
2-Fluorophenol	*39*	*X*	*43 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
2,4,6-Tribromophenol	*66*		*35 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*

Lab Sample ID: LCS 280-529681/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	2.67	1.657		mg/Kg		62	62 - 120
Acenaphthylene	2.67	1.646	*	mg/Kg		62	64 - 120
Anthracene	2.67	1.790		mg/Kg		67	66 - 120
Benzidine	5.33	1.482	J	mg/Kg		28	5 - 120
Benzo[a]anthracene	2.67	1.822		mg/Kg		68	64 - 120
Benzo[b]fluoranthene	2.67	1.890		mg/Kg		71	58 - 120
Benzo[k]fluoranthene	2.67	1.876		mg/Kg		70	62 - 120
Benzo[g,h,i]perylene	2.67	1.836		mg/Kg		69	58 - 120
Benzo[a]pyrene	2.67	1.864		mg/Kg		70	65 - 120
Bis(2-chloroethyl)ether	2.67	1.455	*	mg/Kg		55	57 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-529681/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di (2-ethylhexyl)phthalate	2.67	1.965		mg/Kg		74	65 - 120
Chrysene	2.67	1.808		mg/Kg		68	65 - 120
Dibenz(a,h)anthracene	2.67	1.862		mg/Kg		70	56 - 120
Dichlorobenzidine, 3,3'-	5.33	3.646		mg/Kg		68	22 - 120
Diethyl phthalate	2.67	1.786	*	mg/Kg		67	68 - 120
Dimethyl phthalate	2.67	1.803		mg/Kg		68	66 - 120
Dibutylphthalate	2.67	1.909		mg/Kg		72	66 - 120
2,4-Dinitrotoluene	2.67	1.878		mg/Kg		70	68 - 120
2,6-Dinitrotoluene	2.67	1.781	*	mg/Kg		67	68 - 120
1,2-Diphenylhydrazine(as Azobenzene)	2.70	1.693		mg/Kg		63	60 - 120
Fluoranthene	2.67	1.885		mg/Kg		71	64 - 120
Fluorene	2.67	1.720	*	mg/Kg		65	66 - 120
Hexachlorobenzene	2.67	1.824		mg/Kg		68	65 - 120
Hexachlorobutadiene	2.67	1.545		mg/Kg		58	58 - 120
Hexachlorocyclopentadiene	5.33	3.407		mg/Kg		64	43 - 120
Hexachloroethane	2.67	1.415	*	mg/Kg		53	56 - 120
Indeno[1,2,3-cd]pyrene	2.67	1.876		mg/Kg		70	46 - 120
Isophorone	2.67	1.507		mg/Kg		56	56 - 120
1-Methylnaphthalene	2.67	1.586		mg/Kg		59	57 - 120
2-Methylnaphthalene	2.67	1.574	*	mg/Kg		59	60 - 120
Naphthalene	2.67	1.529	*	mg/Kg		57	59 - 120
Nitrobenzene	2.67	1.483		mg/Kg		56	55 - 120
N-Nitrosodimethylamine	2.67	1.325		mg/Kg		50	50 - 120
N-Nitrosodiphenylamine	2.67	1.764		mg/Kg		66	65 - 120
Phenanthrene	2.67	1.790		mg/Kg		67	67 - 120
Pyrene	2.67	1.832		mg/Kg		69	66 - 120
1,2,4,5-Tetrachlorobenzene	2.67	1.624		mg/Kg		61	60 - 120
2,4-Dichlorophenol	2.67	1.668	*	mg/Kg		63	64 - 120
Dinitrophenols	5.33	3.661		mg/Kg		69	52 - 120
Dinitro-o-cresol	5.33	3.773		mg/Kg		71	60 - 120
Pentachlorophenol	5.33	3.886		mg/Kg		73	50 - 120
2,4,6-Trichlorophenol	2.67	1.745		mg/Kg		65	64 - 120
2,4,5-Trichlorophenol	2.67	1.783		mg/Kg		67	65 - 120
Atrazine	2.67	1.925		mg/Kg		72	50 - 150
bis (2-chloroisopropyl) ether	2.67	1.342		mg/Kg		50	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*59*		*46 - 120*
2-Fluorobiphenyl	*61*		*46 - 120*
Terphenyl-d14	*80*		*46 - 120*
Phenol-d5 (Surr)	*62*		*46 - 120*
2-Fluorophenol	*62*		*43 - 120*
2,4,6-Tribromophenol	*75*		*35 - 120*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 240-476391/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476394 — **Prep Batch: 476391**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0642	U	0.100	0.0642	mg/Kg		03/11/21 09:04	03/11/21 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*20 - 140*	*03/11/21 09:04*	*03/11/21 12:04*	*1*

Lab Sample ID: LCS 240-476391/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476394 — **Prep Batch: 476391**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	0.800	0.7482		mg/Kg		94	75 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*81*		*20 - 140*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 240-476548/15-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476697 — **Prep Batch: 476548**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.6	U	50.0	34.6	mg/Kg		03/12/21 07:33	03/15/21 10:38	1
C28-C36	34.6	U	50.0	34.6	mg/Kg		03/12/21 07:33	03/15/21 10:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*82*		*39 - 120*	*03/12/21 07:33*	*03/15/21 10:38*	*1*

Lab Sample ID: LCS 240-476548/16-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476697 — **Prep Batch: 476548**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10 - C28]	250	195.4		mg/Kg		78	49 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*72*		*39 - 120*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 240-476383/16-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476838 — **Prep Batch: 476383**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.910	U	5.00	0.910	ug/Kg		03/11/21 08:26	03/15/21 18:53	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 240-476383/16-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, gamma-	1.79	U	5.00	1.79	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, beta-	1.73	U	5.00	1.73	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, delta-	1.69	U	5.00	1.69	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Heptachlor	1.58	U	5.00	1.58	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Aldrin	0.770	U	5.00	0.770	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Heptachlor epoxide	1.44	U	5.00	1.44	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan I	1.20	U	5.00	1.20	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Dieldrin	1.10	U	5.00	1.10	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endrin	1.90	U	5.00	1.90	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan II	1.48	U	5.00	1.48	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
DDT	1.13	U	5.00	1.13	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endrin aldehyde	1.31	U	5.00	1.31	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan sulfate	1.28	U	5.00	1.28	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Chlordane (technical)	12.0	U	50.0	12.0	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Toxaphene	25.0	U	100	25.0	ug/Kg		03/11/21 08:26	03/15/21 18:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*30 - 120*	*03/11/21 08:26*	*03/15/21 18:53*	*1*
DCB Decachlorobiphenyl	*94*		*13 - 135*	*03/11/21 08:26*	*03/15/21 18:53*	*1*

Lab Sample ID: LCS 240-476383/17-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclohexane, alpha-	100	89.42		ug/Kg		89	48 - 120
Hexachlorocyclohexane, gamma-	100	78.54		ug/Kg		79	39 - 120
Hexachlorocyclohexane, beta-	100	93.41		ug/Kg		93	45 - 120
Hexachlorocyclohexane, delta-	100	92.21		ug/Kg		92	33 - 120
Heptachlor	100	95.75		ug/Kg		96	48 - 120
Aldrin	100	88.39		ug/Kg		88	36 - 120
Heptachlor epoxide	100	93.19		ug/Kg		93	51 - 120
Endosulfan I	100	80.39		ug/Kg		80	28 - 120
Dieldrin	100	97.12		ug/Kg		97	47 - 120
Endrin	100	99.57		ug/Kg		100	28 - 136
Endosulfan II	100	77.49		ug/Kg		77	39 - 120
DDT	100	104.2		ug/Kg		104	48 - 120
Endrin aldehyde	100	86.66		ug/Kg		87	38 - 120
Endosulfan sulfate	100	122.8	*	ug/Kg		123	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*76*		*30 - 120*
DCB Decachlorobiphenyl	*101*		*13 - 135*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 560-183757/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183780 — **Prep Batch: 183757**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1221	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1232	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1242	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1248	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1254	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1260	0.0100	U	0.0330	0.0100	mg/Kg		03/19/21 07:31	03/19/21 15:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*99*		*32 - 132*	*03/19/21 07:31*	*03/19/21 15:35*	*1*
DCB Decachlorobiphenyl	*88*		*57 - 138*	*03/19/21 07:31*	*03/19/21 15:35*	*1*

Lab Sample ID: LCS 560-183757/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183780 — **Prep Batch: 183757**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	0.667	0.5077		mg/Kg		76	40 - 130
Aroclor 1260	0.667	0.4822		mg/Kg		72	40 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*91*		*32 - 132*
DCB Decachlorobiphenyl	*78*		*57 - 138*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-529222/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 529390 — **Prep Batch: 529222**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0227	U	0.100	0.0227	mg/Kg		03/16/21 15:34	03/18/21 05:15	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0430	U	0.200	0.0430	mg/Kg		03/16/21 15:34	03/18/21 05:15	1
2,4,6-Trinitrotoluene	0.0307	U	0.100	0.0307	mg/Kg		03/16/21 15:34	03/18/21 05:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*		*83 - 122*	*03/16/21 15:34*	*03/18/21 05:15*	*1*

Lab Sample ID: LCS 280-529222/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 529390 — **Prep Batch: 529222**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	1.00	0.9950		mg/Kg		100	80 - 120
Hexahydro-1,3,5-trinitro-1,3,5-triazine	1.00	1.011		mg/Kg		101	80 - 124
2,4,6-Trinitrotoluene	1.00	1.020		mg/Kg		102	80 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dinitrobenzene	95		83 - 122

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Lab Sample ID: MB 280-528801/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528997 — **Prep Batch: 528801**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0824	U	0.500	0.0824	ug/Kg		03/11/21 12:20	03/12/21 19:48	1

Lab Sample ID: LCS 280-528801/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528997 — **Prep Batch: 528801**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	0.500	0.5037		ug/Kg		101	80 - 120

Lab Sample ID: DLCK 280-528995/12 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528995

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	0.0500	0.04765	J	ug/L		95	70 - 130

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Lab Sample ID: MB 280-529188/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 531134 — **Prep Batch: 529188**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.230	U	0.800	0.230	ug/Kg		03/16/21 13:05	04/01/21 11:25	1
Perfluorohexanesulfonic acid (PFHxS)	0.280	U	0.800	0.280	ug/Kg		03/16/21 13:05	04/01/21 11:25	1
Perfluorooctanesulfonic acid (PFOS)	0.140	U	0.800	0.140	ug/Kg		03/16/21 13:05	04/01/21 11:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	98		57 - 153	03/16/21 13:05	04/01/21 11:25	1
13C8 PFOS	100		70 - 130	03/16/21 13:05	04/01/21 11:25	1

Lab Sample ID: LCS 280-529188/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 531134 — **Prep Batch: 529188**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	20.0	18.68		ug/Kg		93	70 - 131
Perfluorohexanesulfonic acid (PFHxS)	18.2	16.44		ug/Kg		90	70 - 135
Perfluorooctanesulfonic acid (PFOS)	18.6	15.23		ug/Kg		82	70 - 130

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: DV-LC-0012 - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 280-529188/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531134 **Prep Batch: 529188**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
13C8 PFOA	99		57 - 153
13C8 PFOS	105		70 - 130

Lab Sample ID: DLCK 280-530729/13 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530729

Analyte			Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits		
Perfluorooctanoic acid (PFOA)			0.500	0.5778	J	ug/L		116	70 - 130		
Perfluorohexanesulfonic acid (PFHxS)			0.455	0.4461	J	ug/L		98	70 - 130		
Perfluorooctanesulfonic acid (PFOS)			0.464	0.665	U	ug/L		98	70 - 130		

Surrogate	DLCK %Recovery	DLCK Qualifier	Limits
13C8 PFOA	105		57 - 153
13C8 PFOS	106		70 - 130

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 160-501560/1-A ^2 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502417 **Prep Batch: 501560**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0668	U	0.178	0.0668	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Arsenic	0.356	U	0.891	0.356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Barium	0.446	U	1.78	0.446	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Beryllium	0.0356	U	0.0891	0.0356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Cadmium	0.0214	U	0.0446	0.0214	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Chromium	0.401	U	0.891	0.401	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Iron	5.35	U	10.7	5.35	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Copper	0.356	U	0.891	0.356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Manganese	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Lead	0.111	U	0.267	0.111	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Antimony	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Selenium	0.285	U	0.446	0.285	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Thallium	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Zinc	1.78	U	4.46	1.78	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Uranium	0.0356	U	0.0891	0.0356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2

Lab Sample ID: MB 160-501560/1-A ^2 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502812 **Prep Batch: 501560**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0668	U	0.178	0.0668	mg/Kg		03/11/21 10:09	03/23/21 12:38	2
Beryllium	0.0356	U	0.0891	0.0356	mg/Kg		03/11/21 10:09	03/23/21 12:38	2
Cadmium	0.0214	U	0.0446	0.0214	mg/Kg		03/11/21 10:09	03/23/21 12:38	2

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 160-501560/1-A ^2 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502812 **Prep Batch: 501560**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/23/21 12:38	2

Lab Sample ID: LCS 160-501560/2-A ^2 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502417 **Prep Batch: 501560**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	17.9	17.66		mg/Kg		99	66 - 133
Arsenic	89.4	91.81		mg/Kg		103	70 - 131
Barium	89.4	87.58		mg/Kg		98	74 - 125
Beryllium	8.94	8.422		mg/Kg		94	74 - 126
Cadmium	89.4	88.32		mg/Kg		99	73 - 139
Chromium	89.4	92.56		mg/Kg		104	69 - 130
Iron	894	938.2		mg/Kg		105	32 - 167
Copper	89.4	90.05		mg/Kg		101	73 - 126
Manganese	89.4	95.29		mg/Kg		107	77 - 124
Lead	89.4	89.23		mg/Kg		100	80 - 120
Antimony	44.7	42.04		mg/Kg		94	21 - 251
Selenium	44.7	44.80		mg/Kg		100	69 - 131
Thallium	17.9	17.45		mg/Kg		98	68 - 131
Zinc	89.4	90.64		mg/Kg		101	71 - 128
Uranium	89.4	89.13		mg/Kg		100	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 160-502981/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 503591 **Prep Batch: 502981**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.01147	J	0.0298	0.00993	mg/Kg		03/24/21 17:26	03/24/21 20:28	1

Lab Sample ID: LCSSRM 160-502981/2-A ^20 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 503591 **Prep Batch: 502981**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	18.4	14.29		mg/Kg		77.6	59.8 - 159.2

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 240-476868/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476877 **Prep Batch: 476868**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.190	U	0.500	0.190	mg/Kg		03/15/21 18:53	03/15/21 21:18	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 240-476868/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476877 **Prep Batch: 476868**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	5.71	6.041		mg/Kg		106	65 - 128

Method: 9045D - pH

Lab Sample ID: LCS 560-183451/2 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	5.00	5.0		SU		100	98 - 102

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-477215/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.93	U	10.0	4.93	mg/Kg			03/18/21 11:58	1
Fluoride	0.334	U	0.500	0.334	mg/Kg			03/18/21 11:58	1
Sulfate	3.89	U	10.0	3.89	mg/Kg			03/18/21 11:58	1

Lab Sample ID: LCS 240-477215/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	500	502.8		mg/Kg		101	90 - 110
Fluoride	25.0	26.19		mg/Kg		105	90 - 110
Sulfate	500	511.2		mg/Kg		102	90 - 110

Lab Sample ID: MB 240-477215/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.9762	J	5.00	0.867	mg/Kg			03/18/21 11:58	1
Nitrate as N	1.41	U	5.00	1.41	mg/Kg			03/18/21 11:58	1
Nitrate Nitrite as N	0.9762	J	5.00	0.276	mg/Kg			03/18/21 11:58	1

Lab Sample ID: LCS 240-477215/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	25.0	25.51		mg/Kg		102	90 - 110
Nitrate as N	25.0	26.14		mg/Kg		105	90 - 110

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method: 9065 - Phenolics, Total Recoverable

Lab Sample ID: MB 240-478900/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 478913 — **Prep Batch: 478900**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

Lab Sample ID: LCS 240-478900/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 478913 — **Prep Batch: 478900**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenols, Total	48.6	49.81		mg/Kg		102	59 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 560-183718/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			03/16/21 14:30	1

Lab Sample ID: LCS 560-183718/2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	2250	2088		mg/L		93	90 - 110

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-501638/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504121 — **Prep Batch: 501638**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03226	U	0.0596	0.0597	1.00	0.175	pCi/g	03/12/21 13:14	04/02/21 06:37	1
Radium-228	0.05110	U	0.0908	0.0909		0.165	pCi/g	03/12/21 13:14	04/02/21 06:37	1
Combined Radium 226 + 228	0.08337	U	0.1086	0.1088		0.175	pCi/g	03/12/21 13:14	04/02/21 06:37	1

Lab Sample ID: LCS 160-501638/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504120 — **Prep Batch: 501638**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Americium-241	96.4	98.73		11.6		1.21	pCi/g	102	87 - 116
Cesium-137	26.5	28.98		3.04		0.245	pCi/g	109	87 - 120
Cobalt-60	9.10	10.01		1.05		0.0802	pCi/g	110	87 - 115

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Laboratory: Eurofins Xenco, Corpus Christi

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Louisiana	NELAP	05094	06-30-21
Oklahoma	State	2020-006	08-31-21
Texas	NELAP	T104704210-19-23	03-31-21
USDA	US Federal Programs	P330-18-00314	10-31-21

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21 *
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21 *
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Laboratory: Eurofins TestAmerica, Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21
A2LA	ISO/IEC 17025	2907.01	10-31-21
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-28-22
Arizona	State	AZ0713	12-21-21
Arkansas DEQ	State	19-047-0	06-01-21
California	State	2513	01-08-22
Connecticut	State	PH-0686	09-30-20 *
Florida	NELAP	E87667-57	07-01-21
Georgia	State	4025-011	01-08-22
Illinois	NELAP	2000172019-1	04-30-21
Iowa	State	IA#370	12-02-21
Kansas	NELAP	E-10166	04-30-21
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-21
Minnesota	NELAP	1788752	12-31-21
Nevada	State	CO000262020-1	07-31-21
New Hampshire	NELAP	205319	04-28-21
New Jersey	NELAP	190002	06-30-21
New York	NELAP	59923	04-01-22
North Carolina (WW/SW)	State	358	12-31-21
North Dakota	State	R-034	01-08-22
Oklahoma	State	2018-006	09-01-21
Oregon	NELAP	4025-011	01-08-22
Pennsylvania	NELAP	013	07-31-21
South Carolina	State	72002001	01-08-22
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-20-18	09-30-21
US Fish & Wildlife	US Federal Programs	058448	08-01-21
USDA	US Federal Programs	P330-18-00099	03-26-21 *
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-21
Virginia	NELAP	10490	06-14-21
Washington	State	C583-19	08-03-21
West Virginia DEP	State	354	11-30-21
Wisconsin	State	999615430	08-31-21
Wyoming (UST)	A2LA	2907.01	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-21
Florida	NELAP	E81010	06-30-21
Georgia	State	E81010(FL)	06-30-21
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026002	06-30-21
Tennessee	State	TN02907	06-30-21
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-21
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-21

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-07-21
ANAB	Dept. of Energy	L2305.01	04-07-21
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21 *
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CC
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL DEN
8270D	Pesticides by GC/MS	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL CAN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
8081A	Organochlorine Pesticides (GC)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CC
8330B	Nitroaromatics and Nitramines (HPLC)	SW846	TAL DEN
6860	Perchlorate by IC/MS or IC/MS/MS	EPA	TAL DEN
DV-LC-0012	Fluorinated Alkyl Substances	TAL-DEN	TAL DEN
6020	Metals (ICP/MS)	SW846	TAL SL
7471A	Mercury (CVAA)	SW846	TAL SL
9012B	Cyanide, Total andor Amenable	SW846	TAL CAN
9045D	pH	SW846	TAL CC
9056A	Anions, Ion Chromatography	SW846	TAL CAN
9065	Phenolics, Total Recoverable	SW846	TAL CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CC
GA-01-R	Radium-226 & Other Gamma Emitters (GS)	DOE	TAL SL
3050B	Preparation, Metals	SW846	TAL SL
335.521	TCEQ- 7-Day Distilled Water Leachate Extraction	TAC-30	TAL CC
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL CC
3546	Microwave Extraction	SW846	TAL PEN
3550C	Ultrasonic Extraction	SW846	TAL DEN
5030A	Purge and Trap	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CC
6860	Deionized Water Leach Prep	SW846	TAL DEN
7471A	Preparation, Mercury	SW846	TAL SL
8330B	Sonication Extraction (Explosives)	SW846	TAL DEN
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL CAN
DI Leach	Deionized Water Leaching Procedure	ASTM	TAL CAN
Distill/Phenol	Distillation, Phenolics	None	TAL CAN
Dry and Grind	Preparation, Dry and Grind	None	TAL SL
Fill_Geo-21	Fill Geometry, 21-Day In-Growth	None	TAL SL
Increment, prep	ISM - Dry, Disaggregate, Sieve, 2 D Slabcake Subsample	EPA	TAL DEN
PFC leach	Leaching procedure for PFAS	TAL-DEN	TAL DEN

Protocol References:

ASTM = ASTM International
DOE = U.S. Department of Energy
EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAC-30 = Chapter 30 Of The Texas Administrative Code, May 19, 1995.
TAL-DEN = TestAmerica Laboratories, Denver, Facility Standard Operating Procedure.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Method	Method Description	Protocol	Laboratory

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL CC = Eurofins Xenco, Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2471

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
560-93041-1	Cell 37 -BG-S-3-4-210302	Solid	03/04/21 15:20	03/05/21 11:48	
560-93041-2	Cell 33 -BG-S-3-4-210302	Solid	03/04/21 12:15	03/05/21 11:48	

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 93041
Address: 630 Plaza Drive Suite 100	Due Date Requested:			
City: Highlands Ranch	TAT Requested (days): Std			
State, Zip: CO, 80129-2377	PO #:			
Phone: 303-710-7537(Tel)	WO #:			
Email: Alison.Schaffer@arcadis.com				
Project Name: Chevron - Jal Land Farm Soils	Project #: 56008683			
Site: Landfarm	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_ DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
Cell 37-BG-S-3-4-210304	3/4/21	1520	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell 33-BG-S-3-4-210304	3/4/21	1215	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	

3/4/21

560-93041 Chain of Custody

Loc: 560
93041

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		3/4/21 1730	Arcadis	Caitlyn Fowler	03/05/2021 1148	EX
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		3.8 IR-8 C6 3.0

Ver: 01/16/2019

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Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22917.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93041-1
Address: 13715 Rider Trail North, .	Due Date Requested: 4/1/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/04/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/3050B_2% (MOD) Copy Analytes	GA_01_R_Ra/Dry_Grind (MOD) Radium-226/228	7471A/7471A_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Cell 37 -BG-S-3-4-210302 (560-93041-1)	3/4/21	15:20 Central		Solid			X	X	X	2	
Cell 33 -BG-S-3-4-210302 (560-93041-2)	3/4/21	12:15 Central		Solid			X	X	X	2	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] FE	3/8/21 1700	EX	FE		
2	FE			Siena Wooldridge	3/9/21 0747	ETAST
3						

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11.01.2020

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Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22920.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93041-1
Address: 4101 Shuffel Street NW, .	Due Date Requested: 4/1/2021			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/04/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/3546 (MOD) Copy Analytes	8015C_GRO/5035A_FW Gasoline Range Organics [C6-C10]	9056A/DI_LEACH	9056A_28D/DI_LEACH (MOD) Pick List	8081A/3540C (MOD) Priority Pollutant List	9012B/9012B_Prep	9065/Distill_Phenol	Total Number of containers	Special Instructions/Note:
			Preservation Code:												
Cell 37 -BG-S-3-4-210302 (560-93041-1)	3/4/21	15:20 Central		Solid			X	X	X	X	X	X	X	2	
Cell 33 -BG-S-3-4-210302 (560-93041-2)	3/4/21	12:15 Central		Solid			X	X	X	X	X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Amy Tinley	3/8/21 1700	EX			
2					3-9-21 1015	
3						

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
☐ Yes ☐ No		

Ver: 11.01.2020

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA Corpus Site Name _____ Cooler unpacked by: Adam Jennett
Cooler Received on 3-9-21 Opened on 3-9-21
FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
IR GUN# IR-11 (CF +0.1 °C) Observed Cooler Temp. 1.1 °C Corrected Cooler Temp. 1.2 °C
IR GUN #IR-12 (CF +0.2°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3. Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9. For each sample, does the COC specify preservatives (Y(N), # of containers (Y/N), and sample type of grab/comp(Y(N)?		
10. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11. Sufficient quantity received to perform indicated analyses?	(Yes)	No
12. Are these work share samples and all listed on the COC?	(Yes)	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC022887
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

19. SAMPLE CONDITION
Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION
Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

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Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22922.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93041-1
Address: 4955 Yarrow Street,	Due Date Requested: 4/1/2021			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/04/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6860/6860_Prep Standard 6860 list	PFC/PFC_Leach (MOD) Custom List	8330B/ISM_DD_SI_SS (MOD) DOD Sublist	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Cell 37 -BG-S-3-4-210302 (560-93041-1)	3/4/21	15:20 Central		Solid			X	X	X	2	. ism subsampling is not required.
Cell 33 -BG-S-3-4-210302 (560-93041-2)	3/4/21	12:15 Central		Solid			X	X	X	2	. ism subsampling is not required.

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Amy Tuley	3/8/21 1700	EX		3/9/21 1030	BTADEN
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: 1379059, 1779058

Cooler Temperature(s) °C and Other Remarks: 1.2 IR9CFH0.2

Ver: 11 01/2020

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Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22921.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93041-1
Address: 3355 McLemore Drive,	Due Date Requested: 4/1/2021			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/04/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_AgChem/3546 (MOD) Copy Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Cell 37 -BG-S-3-4-210302 (560-93041-1)	3/4/21	15:20 Central		Solid			X	2	
Cell 33 -BG-S-3-4-210302 (560-93041-2)	3/4/21	12:15 Central		Solid			X	2	

Note: Since laboratory accreditations are subject to change. Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Amy Tinley	3/8/21 1700	EX			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3-9-21 1310	Company ETA

Custody Seals Intact: ∧ Yes ∧ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.4 IR9

Ver: 11 01 2020

ORIGIN ID:CRPA (361) 289-2673
SAMPLE RECEIVING
EUROFINS TESTAMERICA
1733 N. PADRE ISLAND DR.
CORPUS CHRISTI, TX 78408
UNITED STATES US

SHIP DATE: 08MAR21
ACTWGT: 19.60 LB
CAD: 0282075/CAFE3409

BILL SENDER

TO TESTAMERICA PENSACOLA
ATTN: SHIPPING/RECEIVING
3355 MCLEMORE DR.
PENSACOLA FL 32514
(850) 474-1001

REF:
DEPT:

1.492 AC 187

FedEx Express

TUE - 09 MAR 10:30A
PRIORITY OVERNIGHT

TRK# 9508 9555 9485
0201

XH PNSA

32514
FL-US BFM

Part # 154254-354 RIT EXP 10/21

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93041-1

Login Number: 93041 **List Source: Eurofins TestAmerica, Corpus Christi**
List Number: 1
Creator: Tuley, Amy E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93041-1

Login Number: 93041 **List Source: Eurofins TestAmerica, Denver**
List Number: 3 **List Creation: 03/09/21 02:58 PM**
Creator: Rystrom, Joshua R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93041-1

Login Number: 93041 **List Source: Eurofins TestAmerica, Denver**
List Number: 6
Creator: Levegood, William D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93041-1

Login Number: 93041 **List Source: Eurofins TestAmerica, Denver**
List Number: 7 **List Creation: 03/11/21 12:39 PM**
Creator: Levegood, William D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93041-1

Login Number: 93041 **List Source: Eurofins TestAmerica, Pensacola**
List Number: 5 **List Creation: 03/09/21 05:16 PM**
Creator: Conrady, Hank W

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4°C IR-9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93041-1

Login Number: 93041 **List Source: Eurofins TestAmerica, St. Louis**
List Number: 4 **List Creation: 03/09/21 04:11 PM**
Creator: Mazariegos, Leonel A

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2471

Laboratory Job ID: 560-93104-1
Client Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

For:
ARCADIS U.S., Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Attn: Alison Schaffer

Authorized for release by:
4/19/2021 1:30:59 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

LCMS

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Job ID: 560-93104-1

Laboratory: Eurofins Xenco, Corpus Christi

Narrative

Job Narrative
560-93104-1

Comments
No additional comments.

Receipt
The samples were received on 3/9/2021 12:18 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -0.8º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) in preparation batch 280-529681 and analytical batch 280-531704 recovered outside control limits for multiple analytes. The associated samples are outside 2x hold time; therefore the data has been reported. The following samples are affected: Cell 38 -BG-S-3-4-210305 (560-93104-1), Cell 34 -BG-S-3-4-210305 (560-93104-2), (LCS 280-529681/2-A), (560-93104-L-1-B MS) and (560-93104-L-1-C MSD)

Method 8270D: Surrogate recovery for the following sample in preparation batch 280-529681 and analytical batch 280-531704 was outside control limits: (560-93104-L-1-C MSD). Evidence of matrix interferences is not obvious. The sample is outside 2x hold time; therefore the data has been reported.

Method 8270D: The surrogate recovery for the blank associated with preparation batch 280-529681 and analytical batch 280-531704 was outside the upper control limits. The associated samples are outside 2x hold time; therefore the data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 240-476383 and analytical batch 240-476838 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8081A: The laboratory control sample (LCS) for preparation batch 240-476383 and analytical batch 240-476838 recovered outside control limits for the following analyte: Endosulfan sulfate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8015B: The continuing calibration verification (CCV) associated with batch 240-477001 recovered above the upper control limit for Diesel Range Organics [C10 - C28] and o-Terphenyl (Surr). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: Cell 38 -BG-S-3-4-210305 (560-93104-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

RAD
Methods 901.1, GA-01-R: Gamma Prep Batch 160-502083

Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from	Reported to Analyte
Th-234	Pa-234
Th-234	U-238

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Job ID: 560-93104-1 (Continued)

Laboratory: Eurofins Xenco, Corpus Christi (Continued)

Pb-210	Po-210
Pb-210	Bi-210
Cs-137	Ba-137m
Pb-212	Po-216
Xe-131m	Xe-131
Sb-125	Te-125m
Ag-108m	Ag-108
Rh-106	Ru-106
Pb-212	Th-228
Pb-212	Ra-224
U-235	Th-231
Ac-228	Th-232
Ac-228	Ra-228
Th-227	Ra-223
Th-227	Ac-227
Th-227	Bi-211
Th-227	Pb-211
Bi-214	Ra-226

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

Cell 38 -BG-S-3-4-210305 (560-93104-1), Cell 34 -BG-S-3-4-210305 (560-93104-2), (LCS 160-502083/2-A), (MB 160-502083/1-A), (560-93106-C-1-B) and (560-93106-C-1-C DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6020: Due to the high concentration of iron, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-501560 and analytical batch 160-502417 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.(560-93104-B-1-B MS ^2) and (560-93104-B-1-C MSD ^2)

Method 6020: analytical batch 160-502417 The internal standard was outside QC limits in the CCV. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported. (CCV 160-502417/54)

Method 6020: The post digestion spike % recovery for iron associated with batch preparation batch 160-501560 and analytical batch 160-502417 was outside of control limits. The associated sample is: (560-93104-B-1-A PDS ^2).

Methods 6020, 6020A, 6020B: preparation batch 160-501560 and analytical batch 160-502614 The following sample was diluted due to the abundance of salts: Cell 38 -BG-S-3-4-210305 (560-93104-1). Elevated reporting limits (RLs) are provided.

Method 6020: preparation batch 160-501560 and analytical batch 160-502614 The following sample was diluted to bring the concentration of target analytes within the calibration range: Cell 38 -BG-S-3-4-210305 (560-93104-1). Elevated reporting limits (RLs) are provided.

Method 6020: The post digestion spike % recovery for barium associated with batch preparation batch 160-501560 and analytical batch 160-502614 was outside of control limits. The associated sample is: (560-93104-B-1-A PDS ^5).

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-501560 and analytical batch 160-502614 were outside control limits for antimony. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.(560-93104-B-1-B MS ^5) and (560-93104-B-1-C MSD ^5)

Released to Imaging: 5/27/2022 3:16:29 PM

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Job ID: 560-93104-1 (Continued)

Laboratory: Eurofins Xenco, Corpus Christi (Continued)

Method 6020: preparation batch 160-501560 and analytical batch 160-502417
The internal standard was outside QC limits in the method blank. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported. (MB 160-501560/1-A ^2)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 9045D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Cell 38 -BG-S-3-4-210305 (560-93104-1) and Cell 34 -BG-S-3-4-210305 (560-93104-2).

Method SM 2540C: The following samples were prepared outside of preparation holding time due to limited lab equipment to perform leach method in : Cell 38 -BG-S-3-4-210305 (560-93104-1) and Cell 34 -BG-S-3-4-210305 (560-93104-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 6860: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: The samples arrived in clear glass containers but the SOP requires amber glass containers.

Cell 38 -BG-S-3-4-210305 (560-93104-1) and Cell 34 -BG-S-3-4-210305 (560-93104-2)

6860

preparation batch 280-528801

Methods Increment, prep: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: As requested in the method comments, the ISM subsampling portion of the ISM prep process was not performed on Cell 38 -BG-S-3-4-210305 (560-93104-1) and Cell 34 -BG-S-3-4-210305 (560-93104-2) in preparation batch 280-528815 by ISM_DD_SI_SS for 8330B_Sonc_10g / 8330B.

Methods Increment, prep: The following sample was air dried and sieved per the procedure; however, the sample contained material that would not pass through the sieve: Cell 34 -BG-S-3-4-210305 (560-93104-2). This material was removed and not extracted. The non-soil material is described in the aliquot worksheet. In preparation batch 280-528815 by ISM_DD_SI_SS for 8330P_Sonc_10g/8330B.

Method 3546: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: Cell 38 -BG-S-3-4-210305 (560-93104-1) and Cell 34 -BG-S-3-4-210305 (560-93104-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305 Lab Sample ID: 560-93104-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perchlorate	0.219	J	0.481	0.0793	ug/Kg	1		6860	Total/NA
Arsenic	2.58		0.884	0.354	mg/Kg	2		6020	Total/NA
Barium	102		4.42	1.11	mg/Kg	5		6020	Total/NA
Beryllium	0.318		0.0884	0.0354	mg/Kg	2		6020	Total/NA
Chromium	4.94		2.21	0.995	mg/Kg	5		6020	Total/NA
Iron	5310		10.6	5.31	mg/Kg	2		6020	Total/NA
Copper	2.17		0.884	0.354	mg/Kg	2		6020	Total/NA
Manganese	47.0		0.442	0.177	mg/Kg	2		6020	Total/NA
Lead	4.08		0.265	0.111	mg/Kg	2		6020	Total/NA
Zinc	9.82		4.42	1.77	mg/Kg	2		6020	Total/NA
Uranium	0.197		0.0884	0.0354	mg/Kg	2		6020	Total/NA
Mercury	0.0171	J b	0.0297	0.00989	mg/Kg	1		7471A	Total/NA
pH	7.7	HF	0.1	0.1	SU	1		9045D	Total/NA
Phenols, Total	2.40		1.00	0.338	mg/Kg	1		9065	Total/NA
Chloride	11.6		9.97	4.92	mg/Kg	1		9056A	Soluble
Fluoride	4.29		0.499	0.333	mg/Kg	1		9056A	Soluble
Nitrate as N	2.50	J	4.99	1.40	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	2.50	J b	4.99	0.275	mg/Kg	1		9056A	Soluble
Sulfate	85.3		9.97	3.88	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	180	H	10.0	10.0	mg/L	1		SM 2540C	7 Day Leach

Client Sample ID: Cell 34 -BG-S-3-4-210305 Lab Sample ID: 560-93104-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perchlorate	0.124	J	0.457	0.0753	ug/Kg	1		6860	Total/NA
Arsenic	2.57		0.933	0.373	mg/Kg	2		6020	Total/NA
Barium	268		1.87	0.466	mg/Kg	2		6020	Total/NA
Beryllium	0.214		0.0933	0.0373	mg/Kg	2		6020	Total/NA
Cadmium	0.0709		0.0466	0.0224	mg/Kg	2		6020	Total/NA
Chromium	3.55		0.933	0.420	mg/Kg	2		6020	Total/NA
Iron	3630		11.2	5.60	mg/Kg	2		6020	Total/NA
Copper	1.85		0.933	0.373	mg/Kg	2		6020	Total/NA
Manganese	41.1		0.466	0.187	mg/Kg	2		6020	Total/NA
Lead	2.84		0.280	0.117	mg/Kg	2		6020	Total/NA
Zinc	7.23		4.66	1.87	mg/Kg	2		6020	Total/NA
Uranium	0.310		0.0933	0.0373	mg/Kg	2		6020	Total/NA
Mercury	0.0186	J b	0.0301	0.0100	mg/Kg	1		7471A	Total/NA
pH	8.1	HF	0.1	0.1	SU	1		9045D	Total/NA
Phenols, Total	5.59		1.00	0.338	mg/Kg	1		9065	Total/NA
Chloride	7.18	J	10.2	5.01	mg/Kg	1		9056A	Soluble
Fluoride	4.24		0.508	0.339	mg/Kg	1		9056A	Soluble
Nitrate as N	2.69	J	5.08	1.43	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	2.69	J b	5.08	0.280	mg/Kg	1		9056A	Soluble
Sulfate	45.1		10.2	3.95	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	177	H	10.0	10.0	mg/L	1		SM 2540C	7 Day Leach

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Corpus Christi

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305 **Lab Sample ID: 560-93104-1**
Date Collected: 03/05/21 13:50 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.716	U	4.90	0.716	ug/Kg			03/10/21 13:37	1
Chloromethane	1.18	U	4.90	1.18	ug/Kg			03/10/21 13:37	1
Vinyl chloride	0.588	U	4.90	0.588	ug/Kg			03/10/21 13:37	1
Bromomethane	1.08	U	4.90	1.08	ug/Kg			03/10/21 13:37	1
Trichlorofluoromethane	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
Acrolein	8.43	U	49.0	8.43	ug/Kg			03/10/21 13:37	1
1,1-Dichloroethene	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
trans-1,2-Dichloroethene	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
Methyl tert-butyl ether	0.598	U	4.90	0.598	ug/Kg			03/10/21 13:37	1
1,3-Dichlorobenzene	0.304	U	4.90	0.304	ug/Kg			03/10/21 13:37	1
Methylene Chloride	4.90	U	24.5	4.90	ug/Kg			03/10/21 13:37	1
Acrylonitrile	3.53	U	49.0	3.53	ug/Kg			03/10/21 13:37	1
cis-1,2-Dichloroethene	0.559	U	4.90	0.559	ug/Kg			03/10/21 13:37	1
Carbon tetrachloride	0.500	U	4.90	0.500	ug/Kg			03/10/21 13:37	1
Benzene	0.618	U	4.90	0.618	ug/Kg			03/10/21 13:37	1
1,2-Dichloroethane	0.510	U	4.90	0.510	ug/Kg			03/10/21 13:37	1
Trichloroethene	0.275	U	4.90	0.275	ug/Kg			03/10/21 13:37	1
1,1,1-Trichloroethane	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
1,1-Dichloroethane	0.578	U	4.90	0.578	ug/Kg			03/10/21 13:37	1
1,2-Dichloropropane	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
1,4-Dioxane	18.6	U	98.0	18.6	ug/Kg			03/10/21 13:37	1
Chloroform	0.853	U	4.90	0.853	ug/Kg			03/10/21 13:37	1
Bromodichloromethane	0.196	U	4.90	0.196	ug/Kg			03/10/21 13:37	1
1,1-Dichloropropene	0.510	U	4.90	0.510	ug/Kg			03/10/21 13:37	1
cis-1,3-Dichloropropene	0.441	U	4.90	0.441	ug/Kg			03/10/21 13:37	1
Toluene	0.882	U	4.90	0.882	ug/Kg			03/10/21 13:37	1
trans-1,3-Dichloropropene	0.510	U	4.90	0.510	ug/Kg			03/10/21 13:37	1
1,1,2-Trichloroethane	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
Tetrachloroethene	0.725	U	4.90	0.725	ug/Kg			03/10/21 13:37	1
1,3-Dichloropropene, Total	0.510	U	4.90	0.510	ug/Kg			03/10/21 13:37	1
1,2-Dibromoethane	0.294	U	4.90	0.294	ug/Kg			03/10/21 13:37	1
Monochlorobenzene	0.294	U	4.90	0.294	ug/Kg			03/10/21 13:37	1
Ethylbenzene	0.441	U	4.90	0.441	ug/Kg			03/10/21 13:37	1
Xylenes, Total	0.490	U	9.80	0.490	ug/Kg			03/10/21 13:37	1
Styrene	0.294	U	4.90	0.294	ug/Kg			03/10/21 13:37	1
Tribromomethane	0.500	U	4.90	0.500	ug/Kg			03/10/21 13:37	1
1,1,2,2-Tetrachloroethane	0.373	U	4.90	0.373	ug/Kg			03/10/21 13:37	1
1,4-Dichlorobenzene	0.314	U	4.90	0.314	ug/Kg			03/10/21 13:37	1
1,2-Dichlorobenzene	0.245	U	4.90	0.245	ug/Kg			03/10/21 13:37	1
1,2,4-Trichlorobenzene	0.951	U	4.90	0.951	ug/Kg			03/10/21 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*65 - 152*		*03/10/21 13:37*	*1*
Toluene-d8 (Surr)	*101*		*65 - 139*		*03/10/21 13:37*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.8	U	65.0	11.8	ug/Kg		03/16/21 09:20	03/17/21 20:46	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305 Lab Sample ID: 560-93104-1

Date Collected: 03/05/21 13:50 **Matrix: Solid**
Date Received: 03/09/21 12:18

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	90		30 - 164	03/16/21 09:20	03/17/21 20:46	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U	0.330	0.0103	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Acenaphthylene	0.0821	U *	0.330	0.0821	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Anthracene	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzidine	0.990	U	3.30	0.990	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzo[a]anthracene	0.0200	U	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzo[b]fluoranthene	0.0262	U	0.330	0.0262	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzo[k]fluoranthene	0.0400	U	0.330	0.0400	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzo[g,h,i]perylene	0.0160	U	0.330	0.0160	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzo[a]pyrene	0.0200	U	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Bis(2-chloroethyl)ether	0.0166	U *	0.330	0.0166	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Di (2-ethylhexyl)phthalate	0.0460	U	0.330	0.0460	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Chrysene	0.0270	U	0.330	0.0270	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dibenz(a,h)anthracene	0.0190	U	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dichlorobenzidine, 3,3'-	0.0900	U	0.660	0.0900	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Diethyl phthalate	0.0260	U *	0.660	0.0260	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dimethyl phthalate	0.0230	U	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dibutylphthalate	0.0290	U	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
2,4-Dinitrotoluene	0.0660	U	0.330	0.0660	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
2,6-Dinitrotoluene	0.0280	U *	0.330	0.0280	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Fluoranthene	0.0360	U	0.330	0.0360	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Fluorene	0.0180	U *	0.330	0.0180	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Hexachlorobenzene	0.0290	U	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Hexachlorobutadiene	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Hexachlorocyclopentadiene	0.111	U	1.60	0.111	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Hexachloroethane	0.0213	U *	0.330	0.0213	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Indeno[1,2,3-cd]pyrene	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Isophorone	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
1-Methylnaphthalene	0.0112	U	0.330	0.0112	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
2-Methylnaphthalene	0.0190	U *	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Naphthalene	0.0310	U *	0.330	0.0310	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Nitrobenzene	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
N-Nitrosodi-n-butylamine	0.0967	U	0.330	0.0967	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
N-Nitrosodiethylamine	0.0650	U	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
N-Nitrosodimethylamine	0.0370	U	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
N-Nitrosodiphenylamine	0.0210	U	0.330	0.0210	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
N-Nitrosopyrrolidine	0.0640	U	0.330	0.0640	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Pentachlorobenzene	0.0650	U	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Phenanthrene	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Pyrene	0.0121	U	0.330	0.0121	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
1,2,4,5-Tetrachlorobenzene	0.0490	U	0.330	0.0490	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
2,4-Dichlorophenol	0.0100	U *	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dinitrophenols	0.333	U	1.60	0.333	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dinitro-o-cresol	0.330	U	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Pentachlorophenol	0.330	U	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 14:17	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305 Lab Sample ID: 560-93104-1

Date Collected: 03/05/21 13:50 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
2,4,5-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Atrazine	0.0370	U	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
bis (2-chloroisopropyl) ether	0.0230	U	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*48*		*46 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*
2-Fluorobiphenyl	*52*		*46 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*
Terphenyl-d14	*77*		*46 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*
Phenol-d5 (Surr)	*51*		*46 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*
2-Fluorophenol	*51*		*43 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*
2,4,6-Tribromophenol	*72*		*35 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0647	U	0.101	0.0647	mg/Kg		03/11/21 09:04	03/11/21 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*76*		*20 - 140*	*03/11/21 09:04*	*03/11/21 19:21*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.2	U	47.9	33.2	mg/Kg		03/12/21 07:33	03/16/21 18:41	1
C28-C36	33.2	U	47.9	33.2	mg/Kg		03/12/21 07:33	03/16/21 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*87*		*39 - 120*	*03/12/21 07:33*	*03/16/21 18:41*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.935	U	5.14	0.935	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Hexachlorocyclohexane, gamma-	1.84	U	5.14	1.84	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Hexachlorocyclohexane, beta-	1.78	U	5.14	1.78	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Hexachlorocyclohexane, delta-	1.74	U	5.14	1.74	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Heptachlor	1.62	U	5.14	1.62	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Aldrin	0.791	U	5.14	0.791	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Heptachlor epoxide	1.48	U	5.14	1.48	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Endosulfan I	1.23	U	5.14	1.23	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Dieldrin	1.13	U	5.14	1.13	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Endrin	1.95	U	5.14	1.95	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Endosulfan II	1.52	U	5.14	1.52	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
DDT	1.16	U	5.14	1.16	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Endrin aldehyde	1.35	U	5.14	1.35	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Endosulfan sulfate	1.32	U *	5.14	1.32	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Chlordane (technical)	12.3	U	51.4	12.3	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Toxaphene	25.7	U	103	25.7	ug/Kg		03/11/21 08:26	03/15/21 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 120*	*03/11/21 08:26*	*03/15/21 20:36*	*1*
DCB Decachlorobiphenyl	*83*		*13 - 135*	*03/11/21 08:26*	*03/15/21 20:36*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305 Lab Sample ID: 560-93104-1

Date Collected: 03/05/21 13:50 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1221	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1232	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1242	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1248	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1254	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1260	0.00943	U	0.0311	0.00943	mg/Kg		03/19/21 07:31	03/19/21 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*32 - 132*	*03/19/21 07:31*	*03/19/21 19:24*	*1*
DCB Decachlorobiphenyl	*61*		*57 - 138*	*03/19/21 07:31*	*03/19/21 19:24*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0221	U	0.0973	0.0221	mg/Kg		03/16/21 15:34	03/18/21 09:28	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0418	U	0.195	0.0418	mg/Kg		03/16/21 15:34	03/18/21 09:28	1
2,4,6-Trinitrotoluene	0.0299	U	0.0973	0.0299	mg/Kg		03/16/21 15:34	03/18/21 09:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 09:28*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.219**	**J**	0.481	0.0793	ug/Kg		03/11/21 12:20	03/12/21 20:49	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.221	U	0.768	0.221	ug/Kg		03/16/21 13:05	04/01/21 13:02	1
Perfluorohexanesulfonic acid (PFHxS)	0.269	U	0.768	0.269	ug/Kg		03/16/21 13:05	04/01/21 13:02	1
Perfluorooctanesulfonic acid (PFOS)	0.134	U	0.768	0.134	ug/Kg		03/16/21 13:05	04/01/21 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:02*	*1*
13C8 PFOS	*106*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:02*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.166	U	0.442	0.166	mg/Kg		03/11/21 10:09	03/19/21 16:25	5
Arsenic	**2.58**		0.884	0.354	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Barium	**102**		4.42	1.11	mg/Kg		03/11/21 10:09	03/19/21 16:25	5
Beryllium	**0.318**		0.0884	0.0354	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Cadmium	0.0531	U	0.111	0.0531	mg/Kg		03/11/21 10:09	03/19/21 16:25	5
Chromium	**4.94**		2.21	0.995	mg/Kg		03/11/21 10:09	03/19/21 16:25	5
Iron	**5310**		10.6	5.31	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Copper	**2.17**		0.884	0.354	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Manganese	**47.0**		0.442	0.177	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Lead	**4.08**		0.265	0.111	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Antimony	0.442	U	1.11	0.442	mg/Kg		03/11/21 10:09	03/19/21 16:25	5
Selenium	0.283	U	0.442	0.283	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Thallium	0.177	U	0.442	0.177	mg/Kg		03/11/21 10:09	03/17/21 17:44	2

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305 Lab Sample ID: 560-93104-1

Date Collected: 03/05/21 13:50 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	9.82		4.42	1.77	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Uranium	0.197		0.0884	0.0354	mg/Kg		03/11/21 10:09	03/17/21 17:44	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0171	J b	0.0297	0.00989	mg/Kg		03/24/21 17:26	03/24/21 20:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.176	U	0.463	0.176	mg/Kg		03/11/21 09:04	03/11/21 11:10	1
pH	7.7	HF	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	2.40		1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:19	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.6		9.97	4.92	mg/Kg			03/18/21 12:42	1
Nitrite as N	0.864	U	4.99	0.864	mg/Kg			03/18/21 12:42	1
Fluoride	4.29		0.499	0.333	mg/Kg			03/18/21 12:42	1
Nitrate as N	2.50	J	4.99	1.40	mg/Kg			03/18/21 12:42	1
Nitrate Nitrite as N	2.50	J b	4.99	0.275	mg/Kg			03/18/21 12:42	1
Sulfate	85.3		9.97	3.88	mg/Kg			03/18/21 12:42	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180	H	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.447		0.108	0.118	1.00	0.0616	pCi/g	03/16/21 15:31	04/06/21 07:57	1
Radium-228	0.522		0.157	0.166		0.0886	pCi/g	03/16/21 15:31	04/06/21 07:57	1
Combined Radium 226 + 228	0.969		0.191	0.204		0.0886	pCi/g	03/16/21 15:31	04/06/21 07:57	1

Client Sample ID: Cell 34 -BG-S-3-4-210305 Lab Sample ID: 560-93104-2

Date Collected: 03/05/21 11:10 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.731	U	5.01	0.731	ug/Kg			03/10/21 23:39	1
Chloromethane	1.20	U	5.01	1.20	ug/Kg			03/10/21 23:39	1
Vinyl chloride	0.601	U	5.01	0.601	ug/Kg			03/10/21 23:39	1
Bromomethane	1.10	U	5.01	1.10	ug/Kg			03/10/21 23:39	1
Trichlorofluoromethane	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
Acrolein	8.62	U	50.1	8.62	ug/Kg			03/10/21 23:39	1
1,1-Dichloroethene	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
trans-1,2-Dichloroethene	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
Methyl tert-butyl ether	0.611	U	5.01	0.611	ug/Kg			03/10/21 23:39	1
1,3-Dichlorobenzene	0.311	U	5.01	0.311	ug/Kg			03/10/21 23:39	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 34 -BG-S-3-4-210305 **Lab Sample ID: 560-93104-2**
Date Collected: 03/05/21 11:10 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	5.01	U	25.1	5.01	ug/Kg			03/10/21 23:39	1
Acrylonitrile	3.61	U	50.1	3.61	ug/Kg			03/10/21 23:39	1
cis-1,2-Dichloroethene	0.571	U	5.01	0.571	ug/Kg			03/10/21 23:39	1
Carbon tetrachloride	0.511	U	5.01	0.511	ug/Kg			03/10/21 23:39	1
Benzene	0.631	U	5.01	0.631	ug/Kg			03/10/21 23:39	1
1,2-Dichloroethane	0.521	U	5.01	0.521	ug/Kg			03/10/21 23:39	1
Trichloroethene	0.281	U	5.01	0.281	ug/Kg			03/10/21 23:39	1
1,1,1-Trichloroethane	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
1,1-Dichloroethane	0.591	U	5.01	0.591	ug/Kg			03/10/21 23:39	1
1,2-Dichloropropane	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/10/21 23:39	1
Chloroform	0.872	U	5.01	0.872	ug/Kg			03/10/21 23:39	1
Bromodichloromethane	0.200	U	5.01	0.200	ug/Kg			03/10/21 23:39	1
1,1-Dichloropropene	0.521	U	5.01	0.521	ug/Kg			03/10/21 23:39	1
cis-1,3-Dichloropropene	0.451	U	5.01	0.451	ug/Kg			03/10/21 23:39	1
Toluene	0.902	U	5.01	0.902	ug/Kg			03/10/21 23:39	1
trans-1,3-Dichloropropene	0.521	U	5.01	0.521	ug/Kg			03/10/21 23:39	1
1,1,2-Trichloroethane	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
Tetrachloroethene	0.741	U	5.01	0.741	ug/Kg			03/10/21 23:39	1
1,3-Dichloropropene, Total	0.521	U	5.01	0.521	ug/Kg			03/10/21 23:39	1
1,2-Dibromoethane	0.301	U	5.01	0.301	ug/Kg			03/10/21 23:39	1
Monochlorobenzene	0.301	U	5.01	0.301	ug/Kg			03/10/21 23:39	1
Ethylbenzene	0.451	U	5.01	0.451	ug/Kg			03/10/21 23:39	1
Xylenes, Total	0.501	U	10.0	0.501	ug/Kg			03/10/21 23:39	1
Styrene	0.301	U	5.01	0.301	ug/Kg			03/10/21 23:39	1
Tribromomethane	0.511	U	5.01	0.511	ug/Kg			03/10/21 23:39	1
1,1,2,2-Tetrachloroethane	0.381	U	5.01	0.381	ug/Kg			03/10/21 23:39	1
1,4-Dichlorobenzene	0.321	U	5.01	0.321	ug/Kg			03/10/21 23:39	1
1,2-Dichlorobenzene	0.251	U	5.01	0.251	ug/Kg			03/10/21 23:39	1
1,2,4-Trichlorobenzene	0.972	U	5.01	0.972	ug/Kg			03/10/21 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*134*		*65 - 152*		*03/10/21 23:39*	*1*
Toluene-d8 (Surr)	*96*		*65 - 139*		*03/10/21 23:39*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.6	11.9	ug/Kg		03/16/21 09:20	03/17/21 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*98*		*30 - 164*	*03/16/21 09:20*	*03/17/21 21:11*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U	0.329	0.0103	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Acenaphthylene	0.0818	U *	0.329	0.0818	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Anthracene	0.0169	U	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Benzidine	0.987	U	3.29	0.987	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Benzo[a]anthracene	0.0199	U	0.329	0.0199	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Benzo[b]fluoranthene	0.0261	U	0.329	0.0261	mg/Kg		03/19/21 11:14	04/07/21 15:37	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 34 -BG-S-3-4-210305 **Lab Sample ID: 560-93104-2**
Date Collected: 03/05/21 11:10 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.0399	U	0.329	0.0399	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Benzo[g,h,i]perylene	0.0159	U	0.329	0.0159	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Benzo[a]pyrene	0.0199	U	0.329	0.0199	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Bis(2-chloroethyl)ether	0.0165	U *	0.329	0.0165	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Di (2-ethylhexyl)phthalate	0.0458	U	0.329	0.0458	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Chrysene	0.0269	U	0.329	0.0269	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dibenz(a,h)anthracene	0.0189	U	0.329	0.0189	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dichlorobenzidine, 3,3'-	0.0897	U	0.658	0.0897	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Diethyl phthalate	0.0259	U *	0.658	0.0259	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dimethyl phthalate	0.0229	U	0.329	0.0229	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dibutylphthalate	0.0289	U	0.329	0.0289	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2,4-Dinitrotoluene	0.0658	U	0.329	0.0658	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2,6-Dinitrotoluene	0.0279	U *	0.329	0.0279	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0219	U	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Fluoranthene	0.0359	U	0.329	0.0359	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Fluorene	0.0179	U *	0.329	0.0179	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Hexachlorobenzene	0.0289	U	0.329	0.0289	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Hexachlorobutadiene	0.00997	U	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Hexachlorocyclopentadiene	0.111	U	1.59	0.111	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Hexachloroethane	0.0212	U *	0.329	0.0212	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Indeno[1,2,3-cd]pyrene	0.0219	U	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Isophorone	0.0169	U	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
1-Methylnaphthalene	0.0112	U	0.329	0.0112	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2-Methylnaphthalene	0.0189	U *	0.329	0.0189	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Naphthalene	0.0309	U *	0.329	0.0309	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Nitrobenzene	0.0219	U	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
N-Nitrosodi-n-butylamine	0.0964	U	0.329	0.0964	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
N-Nitrosodiethylamine	0.0648	U	0.329	0.0648	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
N-Nitrosodimethylamine	0.0369	U	0.329	0.0369	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
N-Nitrosodiphenylamine	0.0209	U	0.329	0.0209	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
N-Nitrosopyrrolidine	0.0638	U	0.329	0.0638	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Pentachlorobenzene	0.0648	U	0.329	0.0648	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Phenanthrene	0.0169	U	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Pyrene	0.0121	U	0.329	0.0121	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
1,2,4,5-Tetrachlorobenzene	0.0488	U	0.329	0.0488	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2,4-Dichlorophenol	0.00997	U *	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dinitrophenols	0.332	U	1.59	0.332	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dinitro-o-cresol	0.329	U	1.59	0.329	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Pentachlorophenol	0.329	U	1.59	0.329	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2,4,6-Trichlorophenol	0.00997	U	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2,4,5-Trichlorophenol	0.00997	U	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Atrazine	0.0369	U	0.329	0.0369	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
bis (2-chloroisopropyl) ether	0.0229	U	0.329	0.0229	mg/Kg		03/19/21 11:14	04/07/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*60*		*46 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*
2-Fluorobiphenyl	*62*		*46 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*
Terphenyl-d14	*76*		*46 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*
Phenol-d5 (Surr)	*65*		*46 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 34 -BG-S-3-4-210305
Lab Sample ID: 560-93104-2
Date Collected: 03/05/21 11:10
Matrix: Solid
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*64*		*43 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*
2,4,6-Tribromophenol	*71*		*35 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0650	U	0.101	0.0650	mg/Kg		03/11/21 09:04	03/11/21 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*20 - 140*	*03/11/21 09:04*	*03/11/21 19:58*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.5	U	49.9	34.5	mg/Kg		03/12/21 07:33	03/16/21 19:08	1
C28-C36	34.5	U	49.9	34.5	mg/Kg		03/12/21 07:33	03/16/21 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*76*		*39 - 120*	*03/12/21 07:33*	*03/16/21 19:08*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.887	U	4.87	0.887	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Hexachlorocyclohexane, gamma-	1.74	U	4.87	1.74	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Hexachlorocyclohexane, beta-	1.69	U	4.87	1.69	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Hexachlorocyclohexane, delta-	1.65	U	4.87	1.65	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Heptachlor	1.54	U	4.87	1.54	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Aldrin	0.750	U	4.87	0.750	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Heptachlor epoxide	1.40	U	4.87	1.40	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Endosulfan I	1.17	U	4.87	1.17	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Dieldrin	1.07	U	4.87	1.07	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Endrin	1.85	U	4.87	1.85	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Endosulfan II	1.44	U	4.87	1.44	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
DDT	1.10	U	4.87	1.10	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Endrin aldehyde	1.28	U	4.87	1.28	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Endosulfan sulfate	1.25	U *	4.87	1.25	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Chlordane (technical)	11.7	U	48.7	11.7	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Toxaphene	24.4	U	97.5	24.4	ug/Kg		03/11/21 08:26	03/15/21 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*30 - 120*	*03/11/21 08:26*	*03/15/21 20:49*	*1*
DCB Decachlorobiphenyl	*83*		*13 - 135*	*03/11/21 08:26*	*03/15/21 20:49*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1221	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1232	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1242	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1248	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1254	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1260	0.0106	U	0.0351	0.0106	mg/Kg		03/19/21 07:31	03/19/21 19:47	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 34 -BG-S-3-4-210305 Lab Sample ID: 560-93104-2

Date Collected: 03/05/21 11:10 **Matrix: Solid**
Date Received: 03/09/21 12:18

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		32 - 132	03/19/21 07:31	03/19/21 19:47	1
DCB Decachlorobiphenyl	76		57 - 138	03/19/21 07:31	03/19/21 19:47	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0221	U	0.0973	0.0221	mg/Kg		03/16/21 15:34	03/18/21 09:51	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0418	U	0.195	0.0418	mg/Kg		03/16/21 15:34	03/18/21 09:51	1
2,4,6-Trinitrotoluene	0.0299	U	0.0973	0.0299	mg/Kg		03/16/21 15:34	03/18/21 09:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	94		83 - 122	03/16/21 15:34	03/18/21 09:51	1

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.124**	**J**	0.457	0.0753	ug/Kg		03/11/21 12:20	03/12/21 20:54	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.210	U	0.729	0.210	ug/Kg		03/16/21 13:05	04/01/21 13:11	1
Perfluorohexanesulfonic acid (PFHxS)	0.255	U	0.729	0.255	ug/Kg		03/16/21 13:05	04/01/21 13:11	1
Perfluorooctanesulfonic acid (PFOS)	0.128	U	0.729	0.128	ug/Kg		03/16/21 13:05	04/01/21 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	98		57 - 153	03/16/21 13:05	04/01/21 13:11	1
13C8 PFOS	103		70 - 130	03/16/21 13:05	04/01/21 13:11	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0700	U	0.187	0.0700	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Arsenic	**2.57**		0.933	0.373	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Barium	**268**		1.87	0.466	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Beryllium	**0.214**		0.0933	0.0373	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Cadmium	**0.0709**		0.0466	0.0224	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Chromium	**3.55**		0.933	0.420	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Iron	**3630**		11.2	5.60	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Copper	**1.85**		0.933	0.373	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Manganese	**41.1**		0.466	0.187	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Lead	**2.84**		0.280	0.117	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Antimony	0.187	U	0.466	0.187	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Selenium	0.299	U	0.466	0.299	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Thallium	0.187	U	0.466	0.187	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Zinc	**7.23**		4.66	1.87	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Uranium	**0.310**		0.0933	0.0373	mg/Kg		03/11/21 10:09	03/17/21 18:11	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0186**	**J b**	0.0301	0.0100	mg/Kg		03/24/21 17:26	03/24/21 20:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.164	U	0.431	0.164	mg/Kg		03/11/21 09:04	03/11/21 11:12	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 34 -BG-S-3-4-210305 **Lab Sample ID: 560-93104-2**
Date Collected: 03/05/21 11:10 **Matrix: Solid**
Date Received: 03/09/21 12:18

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1	HF	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	5.59		1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:19	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.18	J	10.2	5.01	mg/Kg			03/18/21 13:03	1
Nitrite as N	0.880	U	5.08	0.880	mg/Kg			03/18/21 13:03	1
Fluoride	4.24		0.508	0.339	mg/Kg			03/18/21 13:03	1
Nitrate as N	2.69	J	5.08	1.43	mg/Kg			03/18/21 13:03	1
Nitrate Nitrite as N	2.69	J b	5.08	0.280	mg/Kg			03/18/21 13:03	1
Sulfate	45.1		10.2	3.95	mg/Kg			03/18/21 13:03	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	177	H	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.356		0.0955	0.102	1.00	0.0823	pCi/g	03/16/21 15:31	04/06/21 08:04	1
Radium-228	0.176		0.140	0.141		0.165	pCi/g	03/16/21 15:31	04/06/21 08:04	1
Combined Radium 226 + 228	0.532		0.169	0.174		0.165	pCi/g	03/16/21 15:31	04/06/21 08:04	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 560-183466/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183466

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.730	U	5.00	0.730	ug/Kg			03/10/21 12:21	1
Chloromethane	1.20	U	5.00	1.20	ug/Kg			03/10/21 12:21	1
Vinyl chloride	0.600	U	5.00	0.600	ug/Kg			03/10/21 12:21	1
Bromomethane	1.10	U	5.00	1.10	ug/Kg			03/10/21 12:21	1
Trichlorofluoromethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
Acrolein	8.60	U	50.0	8.60	ug/Kg			03/10/21 12:21	1
1,1-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
trans-1,2-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
Methyl tert-butyl ether	0.610	U	5.00	0.610	ug/Kg			03/10/21 12:21	1
1,3-Dichlorobenzene	0.310	U	5.00	0.310	ug/Kg			03/10/21 12:21	1
Methylene Chloride	5.00	U	25.0	5.00	ug/Kg			03/10/21 12:21	1
Acrylonitrile	3.60	U	50.0	3.60	ug/Kg			03/10/21 12:21	1
cis-1,2-Dichloroethene	0.570	U	5.00	0.570	ug/Kg			03/10/21 12:21	1
Carbon tetrachloride	0.510	U	5.00	0.510	ug/Kg			03/10/21 12:21	1
Benzene	0.630	U	5.00	0.630	ug/Kg			03/10/21 12:21	1
1,2-Dichloroethane	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:21	1
Trichloroethene	0.280	U	5.00	0.280	ug/Kg			03/10/21 12:21	1
1,1,1-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
1,1-Dichloroethane	0.590	U	5.00	0.590	ug/Kg			03/10/21 12:21	1
1,2-Dichloropropane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/10/21 12:21	1
Chloroform	0.870	U	5.00	0.870	ug/Kg			03/10/21 12:21	1
Bromodichloromethane	0.200	U	5.00	0.200	ug/Kg			03/10/21 12:21	1
1,1-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:21	1
cis-1,3-Dichloropropene	0.450	U	5.00	0.450	ug/Kg			03/10/21 12:21	1
Toluene	0.900	U	5.00	0.900	ug/Kg			03/10/21 12:21	1
trans-1,3-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:21	1
1,1,2-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
Tetrachloroethene	0.740	U	5.00	0.740	ug/Kg			03/10/21 12:21	1
1,3-Dichloropropene, Total	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:21	1
1,2-Dibromoethane	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:21	1
Monochlorobenzene	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:21	1
Ethylbenzene	0.450	U	5.00	0.450	ug/Kg			03/10/21 12:21	1
Xylenes, Total	0.500	U	10.0	0.500	ug/Kg			03/10/21 12:21	1
Styrene	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:21	1
Tribromomethane	0.510	U	5.00	0.510	ug/Kg			03/10/21 12:21	1
1,1,2,2-Tetrachloroethane	0.380	U	5.00	0.380	ug/Kg			03/10/21 12:21	1
1,4-Dichlorobenzene	0.320	U	5.00	0.320	ug/Kg			03/10/21 12:21	1
1,2-Dichlorobenzene	0.250	U	5.00	0.250	ug/Kg			03/10/21 12:21	1
1,2,4-Trichlorobenzene	0.970	U	5.00	0.970	ug/Kg			03/10/21 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*65 - 152*		*03/10/21 12:21*	*1*
Toluene-d8 (Surr)	*100*		*65 - 139*		*03/10/21 12:21*	*1*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 560-183466/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	40.0	31.97		ug/Kg		80	13 - 130
Chloromethane	40.0	46.59		ug/Kg		116	61 - 137
Vinyl chloride	40.0	39.51		ug/Kg		99	65 - 139
Bromomethane	40.0	34.17		ug/Kg		85	57 - 155
Trichlorofluoromethane	40.0	36.98		ug/Kg		92	68 - 146
Acrolein	395	423.7		ug/Kg		107	20 - 150
1,1-Dichloroethene	40.0	44.63		ug/Kg		112	70 - 130
trans-1,2-Dichloroethene	40.0	44.70		ug/Kg		112	70 - 132
Methyl tert-butyl ether	40.0	40.09		ug/Kg		100	70 - 130
1,3-Dichlorobenzene	40.0	43.77		ug/Kg		109	70 - 130
Methylene Chloride	40.0	41.68		ug/Kg		104	61 - 150
Acrylonitrile	400	426.1		ug/Kg		107	66 - 137
cis-1,2-Dichloroethene	40.0	45.42		ug/Kg		114	70 - 130
Carbon tetrachloride	40.0	37.05		ug/Kg		93	70 - 136
Benzene	40.0	44.60		ug/Kg		111	70 - 131
1,2-Dichloroethane	40.0	33.01		ug/Kg		83	70 - 130
Trichloroethene	40.0	41.99		ug/Kg		105	70 - 130
1,1,1-Trichloroethane	40.0	38.88		ug/Kg		97	70 - 132
1,1-Dichloroethane	40.0	42.84		ug/Kg		107	70 - 130
1,2-Dichloropropane	40.0	44.29		ug/Kg		111	70 - 130
1,4-Dioxane	800	729.7		ug/Kg		91	10 - 150
Chloroform	40.0	39.03		ug/Kg		98	70 - 130
Bromodichloromethane	40.0	39.58		ug/Kg		99	70 - 130
1,1-Dichloropropene	40.0	46.69		ug/Kg		117	70 - 130
cis-1,3-Dichloropropene	40.0	48.70		ug/Kg		122	70 - 130
Toluene	40.0	45.39		ug/Kg		113	70 - 130
trans-1,3-Dichloropropene	40.0	40.37		ug/Kg		101	70 - 131
1,1,2-Trichloroethane	40.0	40.99		ug/Kg		102	70 - 130
Tetrachloroethene	40.0	45.07		ug/Kg		113	70 - 130
1,3-Dichloropropene, Total	80.0	89.07		ug/Kg		111	
1,2-Dibromoethane	40.0	39.69		ug/Kg		99	70 - 130
Monochlorobenzene	40.0	42.19		ug/Kg		105	70 - 130
Ethylbenzene	40.0	48.91		ug/Kg		122	70 - 130
Xylenes, Total	80.0	95.02		ug/Kg		119	70 - 130
Styrene	40.0	43.26		ug/Kg		108	70 - 130
Tribromomethane	40.0	32.98		ug/Kg		82	59 - 137
1,1,2,2-Tetrachloroethane	40.0	44.42		ug/Kg		111	70 - 130
1,4-Dichlorobenzene	40.0	42.27		ug/Kg		106	70 - 130
1,2-Dichlorobenzene	40.0	42.82		ug/Kg		107	70 - 130
1,2,4-Trichlorobenzene	40.0	46.31		ug/Kg		116	68 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*65 - 152*
Toluene-d8 (Surr)	*103*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 560-183466/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183466

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			40.0	31.73		ug/Kg		79	13 - 130	1	30.0
Chloromethane			40.0	45.25		ug/Kg		113	61 - 137	3	30.0
Vinyl chloride			40.0	39.15		ug/Kg		98	65 - 139	1	30.0
Bromomethane			40.0	35.08		ug/Kg		88	57 - 155	3	30.0
Trichlorofluoromethane			40.0	37.20		ug/Kg		93	68 - 146	1	30.0
Acrolein			395	477.3		ug/Kg		121	20 - 150	12	30.0
1,1-Dichloroethene			40.0	45.22		ug/Kg		113	70 - 130	1	30.0
trans-1,2-Dichloroethene			40.0	44.38		ug/Kg		111	70 - 132	1	30.0
Methyl tert-butyl ether			40.0	43.66		ug/Kg		109	70 - 130	9	30.0
1,3-Dichlorobenzene			40.0	45.21		ug/Kg		113	70 - 130	3	30.0
Methylene Chloride			40.0	43.54		ug/Kg		109	61 - 150	4	30.0
Acrylonitrile			400	502.8		ug/Kg		126	66 - 137	17	30.0
cis-1,2-Dichloroethene			40.0	46.85		ug/Kg		117	70 - 130	3	30.0
Carbon tetrachloride			40.0	37.10		ug/Kg		93	70 - 136	0	30.0
Benzene			40.0	46.49		ug/Kg		116	70 - 131	4	30.0
1,2-Dichloroethane			40.0	36.38		ug/Kg		91	70 - 130	10	30.0
Trichloroethene			40.0	43.03		ug/Kg		108	70 - 130	2	30.0
1,1,1-Trichloroethane			40.0	39.41		ug/Kg		99	70 - 132	1	30.0
1,1-Dichloroethane			40.0	43.69		ug/Kg		109	70 - 130	2	30.0
1,2-Dichloropropane			40.0	48.06		ug/Kg		120	70 - 130	8	30.0
1,4-Dioxane			800	959.1		ug/Kg		120	10 - 150	27	30.0
Chloroform			40.0	40.46		ug/Kg		101	70 - 130	4	30.0
Bromodichloromethane			40.0	43.05		ug/Kg		108	70 - 130	8	30.0
1,1-Dichloropropene			40.0	46.98		ug/Kg		117	70 - 130	1	30.0
cis-1,3-Dichloropropene			40.0	51.45		ug/Kg		129	70 - 130	5	30.0
Toluene			40.0	45.24		ug/Kg		113	70 - 130	0	30.0
trans-1,3-Dichloropropene			40.0	44.34		ug/Kg		111	70 - 131	9	30.0
1,1,2-Trichloroethane			40.0	45.65		ug/Kg		114	70 - 130	11	30.0
Tetrachloroethene			40.0	46.40		ug/Kg		116	70 - 130	3	30.0
1,3-Dichloropropene, Total			80.0	95.79		ug/Kg		120		7	30
1,2-Dibromoethane			40.0	44.42		ug/Kg		111	70 - 130	11	30.0
Monochlorobenzene			40.0	43.75		ug/Kg		109	70 - 130	4	30.0
Ethylbenzene			40.0	49.36		ug/Kg		123	70 - 130	1	30.0
Xylenes, Total			80.0	96.26		ug/Kg		120	70 - 130	1	30.0
Styrene			40.0	45.95		ug/Kg		115	70 - 130	6	30.0
Tribromomethane			40.0	38.07		ug/Kg		95	59 - 137	14	30.0
1,1,2,2-Tetrachloroethane			40.0	48.56		ug/Kg		121	70 - 130	9	30.0
1,4-Dichlorobenzene			40.0	43.55		ug/Kg		109	70 - 130	3	30.0
1,2-Dichlorobenzene			40.0	43.95		ug/Kg		110	70 - 130	3	30.0
1,2,4-Trichlorobenzene			40.0	47.77		ug/Kg		119	68 - 140	3	30.0

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*65 - 152*
Toluene-d8 (Surr)	*100*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 560-183486/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.730	U	5.00	0.730	ug/Kg			03/10/21 15:58	1
Chloromethane	1.20	U	5.00	1.20	ug/Kg			03/10/21 15:58	1
Vinyl chloride	0.600	U	5.00	0.600	ug/Kg			03/10/21 15:58	1
Bromomethane	1.10	U	5.00	1.10	ug/Kg			03/10/21 15:58	1
Trichlorofluoromethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 15:58	1
Acrolein	8.60	U	50.0	8.60	ug/Kg			03/10/21 15:58	1
1,1-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/10/21 15:58	1
trans-1,2-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/10/21 15:58	1
Methyl tert-butyl ether	0.610	U	5.00	0.610	ug/Kg			03/10/21 15:58	1
1,3-Dichlorobenzene	0.310	U	5.00	0.310	ug/Kg			03/10/21 15:58	1
Methylene Chloride	5.00	U	25.0	5.00	ug/Kg			03/10/21 15:58	1
Acrylonitrile	3.60	U	50.0	3.60	ug/Kg			03/10/21 15:58	1
cis-1,2-Dichloroethene	0.570	U	5.00	0.570	ug/Kg			03/10/21 15:58	1
Carbon tetrachloride	0.510	U	5.00	0.510	ug/Kg			03/10/21 15:58	1
Benzene	0.630	U	5.00	0.630	ug/Kg			03/10/21 15:58	1
1,2-Dichloroethane	0.520	U	5.00	0.520	ug/Kg			03/10/21 15:58	1
Trichloroethene	0.280	U	5.00	0.280	ug/Kg			03/10/21 15:58	1
1,1,1-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 15:58	1
1,1-Dichloroethane	0.590	U	5.00	0.590	ug/Kg			03/10/21 15:58	1
1,2-Dichloropropane	0.500	U	5.00	0.500	ug/Kg			03/10/21 15:58	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/10/21 15:58	1
Chloroform	0.870	U	5.00	0.870	ug/Kg			03/10/21 15:58	1
Bromodichloromethane	0.200	U	5.00	0.200	ug/Kg			03/10/21 15:58	1
1,1-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/10/21 15:58	1
cis-1,3-Dichloropropene	0.450	U	5.00	0.450	ug/Kg			03/10/21 15:58	1
Toluene	0.900	U	5.00	0.900	ug/Kg			03/10/21 15:58	1
trans-1,3-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/10/21 15:58	1
1,1,2-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 15:58	1
Tetrachloroethene	0.740	U	5.00	0.740	ug/Kg			03/10/21 15:58	1
1,3-Dichloropropene, Total	0.520	U	5.00	0.520	ug/Kg			03/10/21 15:58	1
1,2-Dibromoethane	0.300	U	5.00	0.300	ug/Kg			03/10/21 15:58	1
Monochlorobenzene	0.300	U	5.00	0.300	ug/Kg			03/10/21 15:58	1
Ethylbenzene	0.450	U	5.00	0.450	ug/Kg			03/10/21 15:58	1
Xylenes, Total	0.500	U	10.0	0.500	ug/Kg			03/10/21 15:58	1
Styrene	0.300	U	5.00	0.300	ug/Kg			03/10/21 15:58	1
Tribromomethane	0.510	U	5.00	0.510	ug/Kg			03/10/21 15:58	1
1,1,2,2-Tetrachloroethane	0.380	U	5.00	0.380	ug/Kg			03/10/21 15:58	1
1,4-Dichlorobenzene	0.320	U	5.00	0.320	ug/Kg			03/10/21 15:58	1
1,2-Dichlorobenzene	0.250	U	5.00	0.250	ug/Kg			03/10/21 15:58	1
1,2,4-Trichlorobenzene	0.970	U	5.00	0.970	ug/Kg			03/10/21 15:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*65 - 152*		*03/10/21 15:58*	*1*
Toluene-d8 (Surr)	*98*		*65 - 139*		*03/10/21 15:58*	*1*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 560-183486/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	40.0	30.00		ug/Kg		75	13 - 130
Chloromethane	40.0	32.93		ug/Kg		82	61 - 137
Vinyl chloride	40.0	33.59		ug/Kg		84	65 - 139
Bromomethane	40.0	39.93		ug/Kg		100	57 - 155
Trichlorofluoromethane	40.0	39.75		ug/Kg		99	68 - 146
Acrolein	395	320.5		ug/Kg		81	20 - 150
1,1-Dichloroethene	40.0	37.90		ug/Kg		95	70 - 130
trans-1,2-Dichloroethene	40.0	36.49		ug/Kg		91	70 - 132
Methyl tert-butyl ether	40.0	34.86		ug/Kg		87	70 - 130
1,3-Dichlorobenzene	40.0	35.24		ug/Kg		88	70 - 130
Methylene Chloride	40.0	35.64		ug/Kg		89	61 - 150
Acrylonitrile	400	340.6		ug/Kg		85	66 - 137
cis-1,2-Dichloroethene	40.0	37.38		ug/Kg		93	70 - 130
Carbon tetrachloride	40.0	43.33		ug/Kg		108	70 - 136
Benzene	40.0	35.15		ug/Kg		88	70 - 131
1,2-Dichloroethane	40.0	39.03		ug/Kg		98	70 - 130
Trichloroethene	40.0	37.77		ug/Kg		94	70 - 130
1,1,1-Trichloroethane	40.0	40.85		ug/Kg		102	70 - 132
1,1-Dichloroethane	40.0	36.38		ug/Kg		91	70 - 130
1,2-Dichloropropane	40.0	34.91		ug/Kg		87	70 - 130
1,4-Dioxane	800	666.9		ug/Kg		83	10 - 150
Chloroform	40.0	38.65		ug/Kg		97	70 - 130
Bromodichloromethane	40.0	41.69		ug/Kg		104	70 - 130
1,1-Dichloropropene	40.0	37.35		ug/Kg		93	70 - 130
cis-1,3-Dichloropropene	40.0	38.49		ug/Kg		96	70 - 130
Toluene	40.0	34.57		ug/Kg		86	70 - 130
trans-1,3-Dichloropropene	40.0	37.84		ug/Kg		95	70 - 131
1,1,2-Trichloroethane	40.0	35.98		ug/Kg		90	70 - 130
Tetrachloroethene	40.0	40.05		ug/Kg		100	70 - 130
1,3-Dichloropropene, Total	80.0	76.33		ug/Kg		95	
1,2-Dibromoethane	40.0	37.33		ug/Kg		93	70 - 130
Monochlorobenzene	40.0	35.96		ug/Kg		90	70 - 130
Ethylbenzene	40.0	36.25		ug/Kg		91	70 - 130
Xylenes, Total	80.0	76.40		ug/Kg		95	70 - 130
Styrene	40.0	39.47		ug/Kg		99	70 - 130
Tribromomethane	40.0	37.10		ug/Kg		93	59 - 137
1,1,2,2-Tetrachloroethane	40.0	34.47		ug/Kg		86	70 - 130
1,4-Dichlorobenzene	40.0	35.43		ug/Kg		89	70 - 130
1,2-Dichlorobenzene	40.0	34.22		ug/Kg		86	70 - 130
1,2,4-Trichlorobenzene	40.0	39.14		ug/Kg		98	68 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*65 - 152*
Toluene-d8 (Surr)	*100*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 560-183486/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			40.0	30.65		ug/Kg		77	13 - 130	2	30.0
Chloromethane			40.0	35.37		ug/Kg		88	61 - 137	7	30.0
Vinyl chloride			40.0	36.85		ug/Kg		92	65 - 139	9	30.0
Bromomethane			40.0	42.54		ug/Kg		106	57 - 155	6	30.0
Trichlorofluoromethane			40.0	44.32		ug/Kg		111	68 - 146	11	30.0
Acrolein			395	375.2		ug/Kg		95	20 - 150	16	30.0
1,1-Dichloroethene			40.0	41.28		ug/Kg		103	70 - 130	9	30.0
trans-1,2-Dichloroethene			40.0	39.63		ug/Kg		99	70 - 132	8	30.0
Methyl tert-butyl ether			40.0	39.57		ug/Kg		99	70 - 130	13	30.0
1,3-Dichlorobenzene			40.0	38.45		ug/Kg		96	70 - 130	9	30.0
Methylene Chloride			40.0	38.37		ug/Kg		96	61 - 150	7	30.0
Acrylonitrile			400	387.1		ug/Kg		97	66 - 137	13	30.0
cis-1,2-Dichloroethene			40.0	40.86		ug/Kg		102	70 - 130	9	30.0
Carbon tetrachloride			40.0	47.31		ug/Kg		118	70 - 136	9	30.0
Benzene			40.0	38.85		ug/Kg		97	70 - 131	10	30.0
1,2-Dichloroethane			40.0	43.38		ug/Kg		108	70 - 130	11	30.0
Trichloroethene			40.0	41.27		ug/Kg		103	70 - 130	9	30.0
1,1,1-Trichloroethane			40.0	45.22		ug/Kg		113	70 - 132	10	30.0
1,1-Dichloroethane			40.0	39.95		ug/Kg		100	70 - 130	9	30.0
1,2-Dichloropropane			40.0	37.38		ug/Kg		93	70 - 130	7	30.0
1,4-Dioxane			800	793.2		ug/Kg		99	10 - 150	17	30.0
Chloroform			40.0	42.05		ug/Kg		105	70 - 130	8	30.0
Bromodichloromethane			40.0	45.87		ug/Kg		115	70 - 130	10	30.0
1,1-Dichloropropene			40.0	40.52		ug/Kg		101	70 - 130	8	30.0
cis-1,3-Dichloropropene			40.0	41.92		ug/Kg		105	70 - 130	9	30.0
Toluene			40.0	37.40		ug/Kg		94	70 - 130	8	30.0
trans-1,3-Dichloropropene			40.0	40.97		ug/Kg		102	70 - 131	8	30.0
1,1,2-Trichloroethane			40.0	38.51		ug/Kg		96	70 - 130	7	30.0
Tetrachloroethene			40.0	41.46		ug/Kg		104	70 - 130	3	30.0
1,3-Dichloropropene, Total			80.0	82.89		ug/Kg		104		8	30
1,2-Dibromoethane			40.0	40.79		ug/Kg		102	70 - 130	9	30.0
Monochlorobenzene			40.0	38.41		ug/Kg		96	70 - 130	7	30.0
Ethylbenzene			40.0	39.56		ug/Kg		99	70 - 130	9	30.0
Xylenes, Total			80.0	82.63		ug/Kg		103	70 - 130	8	30.0
Styrene			40.0	42.94		ug/Kg		107	70 - 130	8	30.0
Tribromomethane			40.0	41.41		ug/Kg		104	59 - 137	11	30.0
1,1,2,2-Tetrachloroethane			40.0	37.91		ug/Kg		95	70 - 130	10	30.0
1,4-Dichlorobenzene			40.0	37.51		ug/Kg		94	70 - 130	6	30.0
1,2-Dichlorobenzene			40.0	37.99		ug/Kg		95	70 - 130	10	30.0
1,2,4-Trichlorobenzene			40.0	42.20		ug/Kg		105	68 - 140	8	30.0

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*65 - 152*
Toluene-d8 (Surr)	*99*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8270D - Pesticides by GC/MS

Lab Sample ID: MB 400-523876/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 524066 — **Prep Batch: 523876**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	12.0	U	66.0	12.0	ug/Kg		03/16/21 09:18	03/17/21 16:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*104*		*30 - 164*	*03/16/21 09:18*	*03/17/21 16:37*	*1*

Lab Sample ID: LCS 400-523876/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 524066 — **Prep Batch: 523876**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Prometon	333	290.2		ug/Kg		87	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Triphenylphosphate	*90*		*30 - 164*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-529681/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 531704 — **Prep Batch: 529681**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U	0.330	0.0103	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Acenaphthylene	0.0821	U	0.330	0.0821	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Anthracene	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzidine	0.990	U	3.30	0.990	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[a]anthracene	0.0200	U	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[b]fluoranthene	0.0262	U	0.330	0.0262	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[k]fluoranthene	0.0400	U	0.330	0.0400	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[g,h,i]perylene	0.0160	U	0.330	0.0160	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[a]pyrene	0.0200	U	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Bis(2-chloroethyl)ether	0.0166	U	0.330	0.0166	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Di (2-ethylhexyl)phthalate	0.0460	U	0.330	0.0460	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Chrysene	0.0270	U	0.330	0.0270	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dibenz(a,h)anthracene	0.0190	U	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dichlorobenzidine, 3,3'-	0.0900	U	0.660	0.0900	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Diethyl phthalate	0.0260	U	0.660	0.0260	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dimethyl phthalate	0.0230	U	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dibutylphthalate	0.0290	U	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4-Dinitrotoluene	0.0660	U	0.330	0.0660	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,6-Dinitrotoluene	0.0280	U	0.330	0.0280	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Fluoranthene	0.0360	U	0.330	0.0360	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Fluorene	0.0180	U	0.330	0.0180	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Hexachlorobenzene	0.0290	U	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Hexachlorobutadiene	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Hexachlorocyclopentadiene	0.111	U	1.60	0.111	mg/Kg		03/19/21 11:14	04/07/21 12:31	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-529681/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	0.0213	U	0.330	0.0213	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Indeno[1,2,3-cd]pyrene	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Isophorone	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
1-Methylnaphthalene	0.0112	U	0.330	0.0112	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2-Methylnaphthalene	0.0190	U	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Naphthalene	0.0310	U	0.330	0.0310	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Nitrobenzene	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodi-n-butylamine	0.0967	U	0.330	0.0967	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodiethylamine	0.0650	U	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodimethylamine	0.0370	U	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodiphenylamine	0.0210	U	0.330	0.0210	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosopyrrolidine	0.0640	U	0.330	0.0640	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Pentachlorobenzene	0.0650	U	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Phenanthrene	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Pyrene	0.0121	U	0.330	0.0121	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
1,2,4,5-Tetrachlorobenzene	0.0490	U	0.330	0.0490	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4-Dichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dinitrophenols	0.333	U	1.60	0.333	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dinitro-o-cresol	0.330	U	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Pentachlorophenol	0.330	U	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4,6-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4,5-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Atrazine	0.0370	U	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
bis (2-chloroisopropyl) ether	0.0230	U	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*37*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
2-Fluorobiphenyl	*41*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
Terphenyl-d14	*76*		*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
Phenol-d5 (Surr)	*41*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
2-Fluorophenol	*39*	*X*	*43 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
2,4,6-Tribromophenol	*66*		*35 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*

Lab Sample ID: LCS 280-529681/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	2.67	1.657		mg/Kg		62	62 - 120
Acenaphthylene	2.67	1.646	*	mg/Kg		62	64 - 120
Anthracene	2.67	1.790		mg/Kg		67	66 - 120
Benzidine	5.33	1.482	J	mg/Kg		28	5 - 120
Benzo[a]anthracene	2.67	1.822		mg/Kg		68	64 - 120
Benzo[b]fluoranthene	2.67	1.890		mg/Kg		71	58 - 120
Benzo[k]fluoranthene	2.67	1.876		mg/Kg		70	62 - 120
Benzo[g,h,i]perylene	2.67	1.836		mg/Kg		69	58 - 120
Benzo[a]pyrene	2.67	1.864		mg/Kg		70	65 - 120
Bis(2-chloroethyl)ether	2.67	1.455	*	mg/Kg		55	57 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-529681/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di (2-ethylhexyl)phthalate	2.67	1.965		mg/Kg		74	65 - 120
Chrysene	2.67	1.808		mg/Kg		68	65 - 120
Dibenz(a,h)anthracene	2.67	1.862		mg/Kg		70	56 - 120
Dichlorobenzidine, 3,3'-	5.33	3.646		mg/Kg		68	22 - 120
Diethyl phthalate	2.67	1.786	*	mg/Kg		67	68 - 120
Dimethyl phthalate	2.67	1.803		mg/Kg		68	66 - 120
Dibutylphthalate	2.67	1.909		mg/Kg		72	66 - 120
2,4-Dinitrotoluene	2.67	1.878		mg/Kg		70	68 - 120
2,6-Dinitrotoluene	2.67	1.781	*	mg/Kg		67	68 - 120
1,2-Diphenylhydrazine(as Azobenzene)	2.70	1.693		mg/Kg		63	60 - 120
Fluoranthene	2.67	1.885		mg/Kg		71	64 - 120
Fluorene	2.67	1.720	*	mg/Kg		65	66 - 120
Hexachlorobenzene	2.67	1.824		mg/Kg		68	65 - 120
Hexachlorobutadiene	2.67	1.545		mg/Kg		58	58 - 120
Hexachlorocyclopentadiene	5.33	3.407		mg/Kg		64	43 - 120
Hexachloroethane	2.67	1.415	*	mg/Kg		53	56 - 120
Indeno[1,2,3-cd]pyrene	2.67	1.876		mg/Kg		70	46 - 120
Isophorone	2.67	1.507		mg/Kg		56	56 - 120
1-Methylnaphthalene	2.67	1.586		mg/Kg		59	57 - 120
2-Methylnaphthalene	2.67	1.574	*	mg/Kg		59	60 - 120
Naphthalene	2.67	1.529	*	mg/Kg		57	59 - 120
Nitrobenzene	2.67	1.483		mg/Kg		56	55 - 120
N-Nitrosodimethylamine	2.67	1.325		mg/Kg		50	50 - 120
N-Nitrosodiphenylamine	2.67	1.764		mg/Kg		66	65 - 120
Phenanthrene	2.67	1.790		mg/Kg		67	67 - 120
Pyrene	2.67	1.832		mg/Kg		69	66 - 120
1,2,4,5-Tetrachlorobenzene	2.67	1.624		mg/Kg		61	60 - 120
2,4-Dichlorophenol	2.67	1.668	*	mg/Kg		63	64 - 120
Dinitrophenols	5.33	3.661		mg/Kg		69	52 - 120
Dinitro-o-cresol	5.33	3.773		mg/Kg		71	60 - 120
Pentachlorophenol	5.33	3.886		mg/Kg		73	50 - 120
2,4,6-Trichlorophenol	2.67	1.745		mg/Kg		65	64 - 120
2,4,5-Trichlorophenol	2.67	1.783		mg/Kg		67	65 - 120
Atrazine	2.67	1.925		mg/Kg		72	50 - 150
bis (2-chloroisopropyl) ether	2.67	1.342		mg/Kg		50	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*59*		*46 - 120*
2-Fluorobiphenyl	*61*		*46 - 120*
Terphenyl-d14	*80*		*46 - 120*
Phenol-d5 (Surr)	*62*		*46 - 120*
2-Fluorophenol	*62*		*43 - 120*
2,4,6-Tribromophenol	*75*		*35 - 120*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 560-93104-1 MS **Client Sample ID: Cell 38 -BG-S-3-4-210305**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.0103	U	2.50	1.953		mg/Kg		78	62 - 120
Acenaphthylene	0.0821	U *	2.50	1.932		mg/Kg		77	64 - 120
Anthracene	0.0170	U	2.50	2.058		mg/Kg		82	66 - 120
Benzidine	0.990	U	5.00	2.381	J	mg/Kg		48	5 - 120
Benzo[a]anthracene	0.0200	U	2.50	2.127		mg/Kg		85	64 - 120
Benzo[b]fluoranthene	0.0262	U	2.50	2.205		mg/Kg		88	58 - 120
Benzo[k]fluoranthene	0.0400	U	2.50	2.140		mg/Kg		86	62 - 120
Benzo[g,h,i]perylene	0.0160	U	2.50	2.142		mg/Kg		86	58 - 120
Benzo[a]pyrene	0.0200	U	2.50	2.180		mg/Kg		87	65 - 120
Bis(2-chloroethyl)ether	0.0166	U *	2.50	1.263	N1	mg/Kg		51	57 - 120
Di (2-ethylhexyl)phthalate	0.0460	U	2.50	2.424		mg/Kg		97	65 - 120
Chrysene	0.0270	U	2.50	2.141		mg/Kg		86	65 - 120
Dibenz(a,h)anthracene	0.0190	U	2.50	2.199		mg/Kg		88	56 - 120
Dichlorobenzidine, 3,3'-	0.0900	U	5.00	4.620		mg/Kg		92	22 - 120
Diethyl phthalate	0.0260	U *	2.50	2.169		mg/Kg		87	68 - 120
Dimethyl phthalate	0.0230	U	2.50	2.132		mg/Kg		85	66 - 120
Dibutylphthalate	0.0290	U	2.50	2.162		mg/Kg		86	66 - 120
2,4-Dinitrotoluene	0.0660	U	2.50	2.235		mg/Kg		89	68 - 120
2,6-Dinitrotoluene	0.0280	U *	2.50	2.164		mg/Kg		87	68 - 120
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U	2.53	2.018		mg/Kg		80	60 - 120
Fluoranthene	0.0360	U	2.50	2.121		mg/Kg		85	64 - 120
Fluorene	0.0180	U *	2.50	2.047		mg/Kg		82	66 - 120
Hexachlorobenzene	0.0290	U	2.50	2.085		mg/Kg		83	65 - 120
Hexachlorobutadiene	0.0100	U	2.50	1.358	N1	mg/Kg		54	58 - 120
Hexachlorocyclopentadiene	0.111	U	5.00	3.242		mg/Kg		65	43 - 120
Hexachloroethane	0.0213	U *	2.50	1.033	N1	mg/Kg		41	56 - 120
Indeno[1,2,3-cd]pyrene	0.0220	U	2.50	2.231		mg/Kg		89	46 - 120
Isophorone	0.0170	U	2.50	1.703		mg/Kg		68	56 - 120
1-Methylnaphthalene	0.0112	U	2.50	1.695		mg/Kg		68	57 - 120
2-Methylnaphthalene	0.0190	U *	2.50	1.645		mg/Kg		66	60 - 120
Naphthalene	0.0310	U *	2.50	1.418	N1	mg/Kg		57	59 - 120
Nitrobenzene	0.0220	U	2.50	1.352	N1	mg/Kg		54	55 - 120
N-Nitrosodimethylamine	0.0370	U	2.50	1.132	N1	mg/Kg		45	50 - 120
N-Nitrosodiphenylamine	0.0210	U	2.50	2.006		mg/Kg		80	65 - 120
Phenanthrene	0.0170	U	2.50	2.019		mg/Kg		81	67 - 120
Pyrene	0.0121	U	2.50	2.168		mg/Kg		87	66 - 120
1,2,4,5-Tetrachlorobenzene	0.0490	U	2.50	1.718		mg/Kg		69	60 - 120
2,4-Dichlorophenol	0.0100	U *	2.50	1.869		mg/Kg		75	64 - 120
Dinitrophenols	0.333	U	5.00	2.477	N1	mg/Kg		50	52 - 120
Dinitro-o-cresol	0.330	U	5.00	3.907		mg/Kg		78	60 - 120
Pentachlorophenol	0.330	U	5.00	4.316		mg/Kg		86	50 - 120
2,4,6-Trichlorophenol	0.0100	U	2.50	2.147		mg/Kg		86	64 - 120
2,4,5-Trichlorophenol	0.0100	U	2.50	2.149		mg/Kg		86	65 - 120
Atrazine	0.0370	U	2.50	2.070		mg/Kg		83	50 - 150
bis (2-chloroisopropyl) ether	0.0230	U	2.50	1.153		mg/Kg		46	46 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 560-93104-1 MS **Client Sample ID: Cell 38 -BG-S-3-4-210305**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5	56		46 - 120
2-Fluorobiphenyl	73		46 - 120
Terphenyl-d14	98		46 - 120
Phenol-d5 (Surr)	60		46 - 120
2-Fluorophenol	55		43 - 120
2,4,6-Tribromophenol	93		35 - 120

Lab Sample ID: 560-93104-1 MSD **Client Sample ID: Cell 38 -BG-S-3-4-210305**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.0103	U	2.57	1.373	N1 N2	mg/Kg		53	62 - 120	35	30
Acenaphthylene	0.0821	U *	2.57	1.350	N1 N2	mg/Kg		52	64 - 120	35	30
Anthracene	0.0170	U	2.57	1.741		mg/Kg		68	66 - 120	17	30
Benzidine	0.990	U	5.14	2.019	J	mg/Kg		39	5 - 120	16	50
Benzo[a]anthracene	0.0200	U	2.57	1.755		mg/Kg		68	64 - 120	19	30
Benzo[b]fluoranthene	0.0262	U	2.57	1.809		mg/Kg		70	58 - 120	20	30
Benzo[k]fluoranthene	0.0400	U	2.57	1.798		mg/Kg		70	62 - 120	17	30
Benzo[g,h,i]perylene	0.0160	U	2.57	1.754		mg/Kg		68	58 - 120	20	30
Benzo[a]pyrene	0.0200	U	2.57	1.789		mg/Kg		70	65 - 120	20	30
Bis(2-chloroethyl)ether	0.0166	U *	2.57	1.114	N1	mg/Kg		43	57 - 120	13	30
Di (2-ethylhexyl)phthalate	0.0460	U	2.57	1.983		mg/Kg		77	65 - 120	20	30
Chrysene	0.0270	U	2.57	1.774		mg/Kg		69	65 - 120	19	30
Dibenz(a,h)anthracene	0.0190	U	2.57	1.798		mg/Kg		70	56 - 120	20	30
Dichlorobenzidine, 3,3'-	0.0900	U	5.14	3.734		mg/Kg		73	22 - 120	21	30
Diethyl phthalate	0.0260	U *	2.57	1.772		mg/Kg		69	68 - 120	20	30
Dimethyl phthalate	0.0230	U	2.57	1.660	N1	mg/Kg		65	66 - 120	25	30
Dibutylphthalate	0.0290	U	2.57	1.907		mg/Kg		74	66 - 120	13	30
2,4-Dinitrotoluene	0.0660	U	2.57	1.843		mg/Kg		72	68 - 120	19	30
2,6-Dinitrotoluene	0.0280	U *	2.57	1.644	N1	mg/Kg		64	68 - 120	27	30
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U	2.60	1.576		mg/Kg		61	60 - 120	25	30
Fluoranthene	0.0360	U	2.57	1.855		mg/Kg		72	64 - 120	13	30
Fluorene	0.0180	U *	2.57	1.554	N1	mg/Kg		60	66 - 120	27	30
Hexachlorobenzene	0.0290	U	2.57	1.773		mg/Kg		69	65 - 120	16	30
Hexachlorobutadiene	0.0100	U	2.57	1.156	N1	mg/Kg		45	58 - 120	16	30
Hexachlorocyclopentadiene	0.111	U	5.14	2.579		mg/Kg		50	43 - 120	23	30
Hexachloroethane	0.0213	U *	2.57	1.047	N1	mg/Kg		41	56 - 120	1	30
Indeno[1,2,3-cd]pyrene	0.0220	U	2.57	1.785		mg/Kg		69	46 - 120	22	30
Isophorone	0.0170	U	2.57	1.177	N1 N2	mg/Kg		46	56 - 120	37	30
1-Methylnaphthalene	0.0112	U	2.57	1.232	N1 N2	mg/Kg		48	57 - 120	32	30
2-Methylnaphthalene	0.0190	U *	2.57	1.243	N1	mg/Kg		48	60 - 120	28	30
Naphthalene	0.0310	U *	2.57	1.198	N1	mg/Kg		47	59 - 120	17	30
Nitrobenzene	0.0220	U	2.57	1.174	N1	mg/Kg		46	55 - 120	14	30
N-Nitrosodimethylamine	0.0370	U	2.57	1.017	N1	mg/Kg		40	50 - 120	11	30
N-Nitrosodiphenylamine	0.0210	U	2.57	1.697		mg/Kg		66	65 - 120	17	30
Phenanthrene	0.0170	U	2.57	1.743		mg/Kg		68	67 - 120	15	30
Pyrene	0.0121	U	2.57	1.785		mg/Kg		69	66 - 120	19	30

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 560-93104-1 MSD **Client Sample ID: Cell 38 -BG-S-3-4-210305**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	0.0490	U	2.57	1.267	N1	mg/Kg		49	60 - 120	30	30
2,4-Dichlorophenol	0.0100	U *	2.57	1.318	N1 N2	mg/Kg		51	64 - 120	35	30
Dinitrophenols	0.333	U	5.14	2.248	N1	mg/Kg		44	52 - 120	10	30
Dinitro-o-cresol	0.330	U	5.14	3.041	N1	mg/Kg		59	60 - 120	25	30
Pentachlorophenol	0.330	U	5.14	3.604		mg/Kg		70	50 - 120	18	30
2,4,6-Trichlorophenol	0.0100	U	2.57	1.479	N1 N2	mg/Kg		58	64 - 120	37	30
2,4,5-Trichlorophenol	0.0100	U	2.57	1.621	N1	mg/Kg		63	65 - 120	28	30
Atrazine	0.0370	U	2.57	1.779		mg/Kg		69	50 - 150	15	30
bis (2-chloroisopropyl) ether	0.0230	U	2.57	1.062	N1	mg/Kg		41	46 - 120	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*45*	*X*	*46 - 120*
2-Fluorobiphenyl	*47*		*46 - 120*
Terphenyl-d14	*77*		*46 - 120*
Phenol-d5 (Surr)	*47*		*46 - 120*
2-Fluorophenol	*47*		*43 - 120*
2,4,6-Tribromophenol	*71*		*35 - 120*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 240-476391/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476394 **Prep Batch: 476391**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0642	U	0.100	0.0642	mg/Kg		03/11/21 09:04	03/11/21 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*20 - 140*	*03/11/21 09:04*	*03/11/21 12:04*	*1*

Lab Sample ID: LCS 240-476391/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476394 **Prep Batch: 476391**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]			0.800	0.7482		mg/Kg		94	75 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*81*		*20 - 140*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 240-476548/15-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476697 **Prep Batch: 476548**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.6	U	50.0	34.6	mg/Kg		03/12/21 07:33	03/15/21 10:38	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 240-476548/15-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476697 **Prep Batch: 476548**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C28-C36	34.6	U	50.0	34.6	mg/Kg		03/12/21 07:33	03/15/21 10:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*82*		*39 - 120*	*03/12/21 07:33*	*03/15/21 10:38*	*1*

Lab Sample ID: LCS 240-476548/16-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476697 **Prep Batch: 476548**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10 - C28]	250	195.4		mg/Kg		78	49 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*72*		*39 - 120*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 240-476383/16-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.910	U	5.00	0.910	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, gamma-	1.79	U	5.00	1.79	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, beta-	1.73	U	5.00	1.73	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, delta-	1.69	U	5.00	1.69	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Heptachlor	1.58	U	5.00	1.58	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Aldrin	0.770	U	5.00	0.770	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Heptachlor epoxide	1.44	U	5.00	1.44	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan I	1.20	U	5.00	1.20	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Dieldrin	1.10	U	5.00	1.10	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endrin	1.90	U	5.00	1.90	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan II	1.48	U	5.00	1.48	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
DDT	1.13	U	5.00	1.13	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endrin aldehyde	1.31	U	5.00	1.31	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan sulfate	1.28	U	5.00	1.28	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Chlordane (technical)	12.0	U	50.0	12.0	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Toxaphene	25.0	U	100	25.0	ug/Kg		03/11/21 08:26	03/15/21 18:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*30 - 120*	*03/11/21 08:26*	*03/15/21 18:53*	*1*
DCB Decachlorobiphenyl	*94*		*13 - 135*	*03/11/21 08:26*	*03/15/21 18:53*	*1*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 240-476383/17-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclohexane, alpha-	100	89.42		ug/Kg		89	48 - 120
Hexachlorocyclohexane, gamma-	100	78.54		ug/Kg		79	39 - 120
Hexachlorocyclohexane, beta-	100	93.41		ug/Kg		93	45 - 120
Hexachlorocyclohexane, delta-	100	92.21		ug/Kg		92	33 - 120
Heptachlor	100	95.75		ug/Kg		96	48 - 120
Aldrin	100	88.39		ug/Kg		88	36 - 120
Heptachlor epoxide	100	93.19		ug/Kg		93	51 - 120
Endosulfan I	100	80.39		ug/Kg		80	28 - 120
Dieldrin	100	97.12		ug/Kg		97	47 - 120
Endrin	100	99.57		ug/Kg		100	28 - 136
Endosulfan II	100	77.49		ug/Kg		77	39 - 120
DDT	100	104.2		ug/Kg		104	48 - 120
Endrin aldehyde	100	86.66		ug/Kg		87	38 - 120
Endosulfan sulfate	100	122.8	*	ug/Kg		123	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*76*		*30 - 120*
DCB Decachlorobiphenyl	*101*		*13 - 135*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 560-183757/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1221	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1232	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1242	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1248	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1254	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1260	0.0100	U	0.0330	0.0100	mg/Kg		03/19/21 07:31	03/19/21 15:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*99*		*32 - 132*	*03/19/21 07:31*	*03/19/21 15:35*	*1*
DCB Decachlorobiphenyl	*88*		*57 - 138*	*03/19/21 07:31*	*03/19/21 15:35*	*1*

Lab Sample ID: LCS 560-183757/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	0.667	0.5077		mg/Kg		76	40 - 130
Aroclor 1260	0.667	0.4822		mg/Kg		72	40 - 130

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 560-183757/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	91		32 - 132
DCB Decachlorobiphenyl	78		57 - 138

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-529222/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529390 **Prep Batch: 529222**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0227	U	0.100	0.0227	mg/Kg		03/16/21 15:34	03/18/21 05:15	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0430	U	0.200	0.0430	mg/Kg		03/16/21 15:34	03/18/21 05:15	1
2,4,6-Trinitrotoluene	0.0307	U	0.100	0.0307	mg/Kg		03/16/21 15:34	03/18/21 05:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	93		83 - 122	03/16/21 15:34	03/18/21 05:15	1

Lab Sample ID: LCS 280-529222/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529390 **Prep Batch: 529222**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	1.00	0.9950		mg/Kg		100	80 - 120
Hexahydro-1,3,5-trinitro-1,3,5-triazine	1.00	1.011		mg/Kg		101	80 - 124
2,4,6-Trinitrotoluene	1.00	1.020		mg/Kg		102	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dinitrobenzene	95		83 - 122

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Lab Sample ID: MB 280-528801/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 528997 **Prep Batch: 528801**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0824	U	0.500	0.0824	ug/Kg		03/11/21 12:20	03/12/21 19:48	1

Lab Sample ID: LCS 280-528801/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 528997 **Prep Batch: 528801**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	0.500	0.5037		ug/Kg		101	80 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS (Continued)

Lab Sample ID: DLCK 280-528995/12 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528995

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	0.0500	0.04765	J	ug/L		95	70 - 130

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Lab Sample ID: MB 280-529188/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 531134 — **Prep Batch: 529188**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.230	U	0.800	0.230	ug/Kg		03/16/21 13:05	04/01/21 11:25	1
Perfluorohexanesulfonic acid (PFHxS)	0.280	U	0.800	0.280	ug/Kg		03/16/21 13:05	04/01/21 11:25	1
Perfluorooctanesulfonic acid (PFOS)	0.140	U	0.800	0.140	ug/Kg		03/16/21 13:05	04/01/21 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 11:25*	*1*
13C8 PFOS	*100*		*70 - 130*	*03/16/21 13:05*	*04/01/21 11:25*	*1*

Lab Sample ID: LCS 280-529188/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 531134 — **Prep Batch: 529188**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	20.0	18.68		ug/Kg		93	70 - 131
Perfluorohexanesulfonic acid (PFHxS)	18.2	16.44		ug/Kg		90	70 - 135
Perfluorooctanesulfonic acid (PFOS)	18.6	15.23		ug/Kg		82	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C8 PFOA	*99*		*57 - 153*
13C8 PFOS	*105*		*70 - 130*

Lab Sample ID: DLCK 280-530729/13 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 530729

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	0.500	0.5778	J	ug/L		116	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	0.455	0.4461	J	ug/L		98	70 - 130
Perfluorooctanesulfonic acid (PFOS)	0.464	0.665	U	ug/L		98	70 - 130

Surrogate	*DLCK %Recovery*	*DLCK Qualifier*	*Limits*
13C8 PFOA	*105*		*57 - 153*
13C8 PFOS	*106*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 160-501560/1-A ^2
Matrix: Solid
Analysis Batch: 502417

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 501560

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0668	U	0.178	0.0668	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Arsenic	0.356	U	0.891	0.356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Barium	0.446	U	1.78	0.446	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Beryllium	0.0356	U	0.0891	0.0356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Cadmium	0.0214	U	0.0446	0.0214	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Chromium	0.401	U	0.891	0.401	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Iron	5.35	U	10.7	5.35	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Copper	0.356	U	0.891	0.356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Manganese	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Lead	0.111	U	0.267	0.111	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Antimony	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Selenium	0.285	U	0.446	0.285	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Thallium	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Zinc	1.78	U	4.46	1.78	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Uranium	0.0356	U	0.0891	0.0356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2

Lab Sample ID: MB 160-501560/1-A ^2
Matrix: Solid
Analysis Batch: 502812

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 501560

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0668	U	0.178	0.0668	mg/Kg		03/11/21 10:09	03/23/21 12:38	2
Beryllium	0.0356	U	0.0891	0.0356	mg/Kg		03/11/21 10:09	03/23/21 12:38	2
Cadmium	0.0214	U	0.0446	0.0214	mg/Kg		03/11/21 10:09	03/23/21 12:38	2
Antimony	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/23/21 12:38	2

Lab Sample ID: LCS 160-501560/2-A ^2
Matrix: Solid
Analysis Batch: 502417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 501560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	17.9	17.66		mg/Kg		99	66 - 133
Arsenic	89.4	91.81		mg/Kg		103	70 - 131
Barium	89.4	87.58		mg/Kg		98	74 - 125
Beryllium	8.94	8.422		mg/Kg		94	74 - 126
Cadmium	89.4	88.32		mg/Kg		99	73 - 139
Chromium	89.4	92.56		mg/Kg		104	69 - 130
Iron	894	938.2		mg/Kg		105	32 - 167
Copper	89.4	90.05		mg/Kg		101	73 - 126
Manganese	89.4	95.29		mg/Kg		107	77 - 124
Lead	89.4	89.23		mg/Kg		100	80 - 120
Antimony	44.7	42.04		mg/Kg		94	21 - 251
Selenium	44.7	44.80		mg/Kg		100	69 - 131
Thallium	17.9	17.45		mg/Kg		98	68 - 131
Zinc	89.4	90.64		mg/Kg		101	71 - 128
Uranium	89.4	89.13		mg/Kg		100	80 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 560-93104-1 MS **Client Sample ID: Cell 38 -BG-S-3-4-210305**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502417 **Prep Batch: 501560**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.58		97.8	95.24		mg/Kg		95	75 - 125
Beryllium	0.318		9.78	9.170		mg/Kg		90	75 - 125
Iron	5310		978	8039	4	mg/Kg		279	75 - 125
Copper	2.17		97.8	89.84		mg/Kg		90	75 - 125
Manganese	47.0		97.8	150.4		mg/Kg		106	75 - 125
Lead	4.08		97.8	95.65		mg/Kg		94	75 - 125
Selenium	0.283	U	48.9	45.02		mg/Kg		92	75 - 125
Thallium	0.177	U	19.6	18.05		mg/Kg		92	75 - 125
Zinc	9.82		97.8	103.9		mg/Kg		96	75 - 125
Uranium	0.197		97.8	96.23		mg/Kg		98	75 - 125

Lab Sample ID: 560-93104-1 MS **Client Sample ID: Cell 38 -BG-S-3-4-210305**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502614 **Prep Batch: 501560**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.166	U	19.6	17.25		mg/Kg		88	75 - 125
Barium	102		97.8	220.9		mg/Kg		122	75 - 125
Cadmium	0.0531	U	97.8	88.97		mg/Kg		91	75 - 125
Chromium	4.94		97.8	91.11		mg/Kg		88	75 - 125
Antimony	0.442	U	48.9	22.40	N1	mg/Kg		46	75 - 125

Lab Sample ID: 560-93104-1 MSD **Client Sample ID: Cell 38 -BG-S-3-4-210305**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502417 **Prep Batch: 501560**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	2.58		92.3	91.30		mg/Kg		96	75 - 125	4	30
Beryllium	0.318		9.23	8.402		mg/Kg		88	75 - 125	9	30
Iron	5310		923	8222	4	mg/Kg		316	75 - 125	2	30
Copper	2.17		92.3	86.44		mg/Kg		91	75 - 125	4	30
Manganese	47.0		92.3	146.1		mg/Kg		107	75 - 125	3	30
Lead	4.08		92.3	91.11		mg/Kg		94	75 - 125	5	30
Selenium	0.283	U	46.1	42.51		mg/Kg		92	75 - 125	6	30
Thallium	0.177	U	18.5	17.38		mg/Kg		94	75 - 125	4	30
Zinc	9.82		92.3	101.0		mg/Kg		99	75 - 125	3	30
Uranium	0.197		92.3	91.24		mg/Kg		99	75 - 125	5	30

Lab Sample ID: 560-93104-1 MSD **Client Sample ID: Cell 38 -BG-S-3-4-210305**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502614 **Prep Batch: 501560**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.166	U	18.5	17.07		mg/Kg		93	75 - 125	1	30
Barium	102		92.3	213.7		mg/Kg		121	75 - 125	3	30
Cadmium	0.0531	U	92.3	88.05		mg/Kg		95	75 - 125	1	30
Chromium	4.94		92.3	96.42		mg/Kg		99	75 - 125	6	30
Antimony	0.442	U	46.1	24.51	N1	mg/Kg		53	75 - 125	9	30

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 160-502981/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 503591 — **Prep Batch: 502981**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.01147	J	0.0298	0.00993	mg/Kg		03/24/21 17:26	03/24/21 20:28	1

Lab Sample ID: LCSSRM 160-502981/2-A ^20 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 503591 — **Prep Batch: 502981**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	18.4	14.29		mg/Kg		77.6	59.8 - 159.2

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 240-476390/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476440 — **Prep Batch: 476390**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.190	U	0.500	0.190	mg/Kg		03/11/21 09:04	03/11/21 10:46	1

Lab Sample ID: LCS 240-476390/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476440 — **Prep Batch: 476390**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	5.71	6.161		mg/Kg		108	65 - 128

Lab Sample ID: MRL 240-476440/10 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476440

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0100	0.01130		mg/L		113	70 - 130

Method: 9045D - pH

Lab Sample ID: LCS 560-183677/2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	5.00	5.0		SU		100	98 - 102

Lab Sample ID: 560-93104-1 DU — **Client Sample ID: Cell 38 -BG-S-3-4-210305**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183677

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.7	HF	7.7		SU		0.1	20

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-477215/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.93	U	10.0	4.93	mg/Kg			03/18/21 11:58	1
Fluoride	0.334	U	0.500	0.334	mg/Kg			03/18/21 11:58	1
Sulfate	3.89	U	10.0	3.89	mg/Kg			03/18/21 11:58	1

Lab Sample ID: LCS 240-477215/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	500	502.8		mg/Kg		101	90 - 110
Fluoride	25.0	26.19		mg/Kg		105	90 - 110
Sulfate	500	511.2		mg/Kg		102	90 - 110

Lab Sample ID: MB 240-477215/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.9762	J	5.00	0.867	mg/Kg			03/18/21 11:58	1
Nitrate as N	1.41	U	5.00	1.41	mg/Kg			03/18/21 11:58	1
Nitrate Nitrite as N	0.9762	J	5.00	0.276	mg/Kg			03/18/21 11:58	1

Lab Sample ID: LCS 240-477215/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	25.0	25.51		mg/Kg		102	90 - 110
Nitrate as N	25.0	26.14		mg/Kg		105	90 - 110

Method: 9065 - Phenolics, Total Recoverable

Lab Sample ID: MB 240-478900/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 478913 **Prep Batch: 478900**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

Lab Sample ID: LCS 240-478900/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 478913 **Prep Batch: 478900**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenols, Total	48.6	49.81		mg/Kg		102	59 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 560-183973/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			03/25/21 14:10	1

Lab Sample ID: LCS 560-183973/2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	2250	2096		mg/L		93	90 - 110

Lab Sample ID: 560-93104-1 DU — **Client Sample ID: Cell 38 -BG-S-3-4-210305**
Matrix: Solid — **Prep Type: 7 Day Leach**
Analysis Batch: 183973

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	180	H	175.0		mg/L		3	20

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-502083/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504442 — **Prep Batch: 502083**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02946	U	0.0720	0.0721	1.00	0.240	pCi/g	03/16/21 15:31	04/06/21 08:46	1
Radium-228	0.09023	U	0.165	0.165		0.165	pCi/g	03/16/21 15:31	04/06/21 08:46	1
Combined Radium 226 + 228	0.1197	U	0.180	0.180		0.240	pCi/g	03/16/21 15:31	04/06/21 08:46	1

Lab Sample ID: LCS 160-502083/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504441 — **Prep Batch: 502083**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Americium-241	96.4	97.72		11.5		1.24	pCi/g	101	87 - 116
Cesium-137	26.5	29.39		3.09		0.295	pCi/g	111	87 - 120
Cobalt-60	9.09	9.439		1.00		0.152	pCi/g	104	87 - 115

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Laboratory: Eurofins Xenco, Corpus Christi

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Louisiana	NELAP	05094	06-30-21
Oklahoma	State	2020-006	08-31-21
Texas	NELAP	T104704210-19-23	03-31-21
USDA	US Federal Programs	P330-18-00314	10-31-21

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21 *
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21 *
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Laboratory: Eurofins TestAmerica, Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21
A2LA	ISO/IEC 17025	2907.01	10-31-21
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-28-22
Arizona	State	AZ0713	12-21-21
Arkansas DEQ	State	19-047-0	06-01-21
California	State	2513	01-08-22
Connecticut	State	PH-0686	09-30-20 *
Florida	NELAP	E87667-57	07-01-21
Georgia	State	4025-011	01-08-22
Illinois	NELAP	2000172019-1	04-30-21
Iowa	State	IA#370	12-02-21
Kansas	NELAP	E-10166	04-30-21
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-21
Minnesota	NELAP	1788752	12-31-21
Nevada	State	CO000262020-1	07-31-21
New Hampshire	NELAP	205319	04-28-21
New Jersey	NELAP	190002	06-30-21
New York	NELAP	59923	04-01-22
North Carolina (WW/SW)	State	358	12-31-21
North Dakota	State	R-034	01-08-22
Oklahoma	State	2018-006	09-01-21
Oregon	NELAP	4025-011	01-08-22
Pennsylvania	NELAP	013	07-31-21
South Carolina	State	72002001	01-08-22
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-20-18	09-30-21
US Fish & Wildlife	US Federal Programs	058448	08-01-21
USDA	US Federal Programs	P330-18-00099	03-26-21 *
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-21
Virginia	NELAP	10490	06-14-21
Washington	State	C583-19	08-03-21
West Virginia DEP	State	354	11-30-21
Wisconsin	State	999615430	08-31-21
Wyoming (UST)	A2LA	2907.01	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-21
Florida	NELAP	E81010	06-30-21
Georgia	State	E81010(FL)	06-30-21
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026002	06-30-21
Tennessee	State	TN02907	06-30-21
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-21
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-21

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-07-21
ANAB	Dept. of Energy	L2305.01	04-07-21
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21 *
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CC
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL DEN
8270D	Pesticides by GC/MS	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL CAN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
8081A	Organochlorine Pesticides (GC)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CC
8330B	Nitroaromatics and Nitramines (HPLC)	SW846	TAL DEN
6860	Perchlorate by IC/MS or IC/MS/MS	EPA	TAL DEN
DV-LC-0012	Fluorinated Alkyl Substances	TAL-DEN	TAL DEN
6020	Metals (ICP/MS)	SW846	TAL SL
7471A	Mercury (CVAA)	SW846	TAL SL
9012B	Cyanide, Total andor Amenable	SW846	TAL CAN
9045D	pH	SW846	TAL CC
9056A	Anions, Ion Chromatography	SW846	TAL CAN
9065	Phenolics, Total Recoverable	SW846	TAL CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CC
GA-01-R	Radium-226 & Other Gamma Emitters (GS)	DOE	TAL SL
3050B	Preparation, Metals	SW846	TAL SL
335.521	TCEQ- 7-Day Distilled Water Leachate Extraction	TAC-30	TAL CC
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL CC
3546	Microwave Extraction	SW846	TAL PEN
3550C	Ultrasonic Extraction	SW846	TAL DEN
5030A	Purge and Trap	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CC
6860	Deionized Water Leach Prep	SW846	TAL DEN
7471A	Preparation, Mercury	SW846	TAL SL
8330B	Sonication Extraction (Explosives)	SW846	TAL DEN
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL CAN
DI Leach	Deionized Water Leaching Procedure	ASTM	TAL CAN
Distill/Phenol	Distillation, Phenolics	None	TAL CAN
Dry and Grind	Preparation, Dry and Grind	None	TAL SL
Fill_Geo-21	Fill Geometry, 21-Day In-Growth	None	TAL SL
Increment, prep	ISM - Dry, Disaggregate, Sieve, 2 D Slabcake Subsample	EPA	TAL DEN
PFC leach	Leaching procedure for PFAS	TAL-DEN	TAL DEN

Protocol References:

ASTM = ASTM International
DOE = U.S. Department of Energy
EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAC-30 = Chapter 30 Of The Texas Administrative Code, May 19, 1995.
TAL-DEN = TestAmerica Laboratories, Denver, Facility Standard Operating Procedure.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Method	Method Description	Protocol	Laboratory

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL CC = Eurofins Xenco, Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2471

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
560-93104-1	Cell 38 -BG-S-3-4-210305	Solid	03/05/21 13:50	03/09/21 12:18	
560-93104-2	Cell 34 -BG-S-3-4-210305	Solid	03/05/21 11:10	03/09/21 12:18	

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 560
93104

eurofins | Environment Testing America

Client Information	Sampler: J. Skinmann	Lab PM: Kudchadkar, Sachin G	Carrie	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 93104
Address: 630 Plaza Drive Suite 100	Due Date Requested:			
City: Highlands Ranch	TAT Requested (days): Std			
State, Zip: CO, 80129-2377				
Phone: 303-710-7537(Tel)	PO #:			
Email: Alison.Schaffer@arcadis.com	WO #:			
Project Name: Chevron - Jal Land Farm Soils	Project #: 56008683			
Site: Landfarm	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_ DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
Cell38-BG-S-3-4-210305	3/5/21	1350	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell34-BG-S-3-4-210305	3/5/21	1110	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank	—	—	—	Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	

gs 3/05/21

560-93104 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed
☐ Return To Client ☐ Disposal E

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/05/20 1700	Arcadis		03/09/21 1218	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		Temp = -0.4 / corrected = -0.8 IR-1

Ver: 01/16/2019

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22929.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93104-1
Address: 13715 Rider Trail North,	Due Date Requested: 4/5/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/05/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/3050B_2% (MOD) Copy Analytes	GA_01_R_Ra/Dry_Grind (MOD) Radium-226/228	7471A/7471A_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Cell 38 -BG-S-3-4-210305 (560-93104-1)	3/5/21	13:50 Central		Solid			X	X	X	2	
Cell 34 -BG-S-3-4-210305 (560-93104-2)	3/5/21	11:10 Central		Solid			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	3/9/21 1700	EX	FED EX		
2	FED EX			[signature]	3/10/21 0920	ETAS
3						

Custody Seals Intact: ∧ Yes ∧ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11.01.2020

Released to Imaging: 5/27/2022 3:16:29 PM

Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

1-1 12

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22930.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93104-1
Address: 4101 Shuffel Street NW.	Due Date Requested: 4/5/2021			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/05/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

C254

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/3546 (MOD) Copy Analytes	8015C_GRO/5035A_FW Gasoline Range Organics [C6-C10]	9056A/DI_LEACH	9056A_28D/DI_LEACH (MOD) Pick List	8081A/3540C (MOD) Priority Pollutant List	9012B/90128_Prep	9065/Distill_Phenol	Total Number of containers
Preservation Code:														
Cell 38 -BG-S-3-4-210305 (560-93104-1)	3/5/21	13:50 Central		Solid			X	X	X	X	X	X	X	2
Cell 34 -BG-S-3-4-210305 (560-93104-2)	3/5/21	11:10 Central		Solid			X	X	X	X	X	X	X	2

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	3/9/21 1700	EX	[signature]	3/10-21 1005	EHC
2						
3						

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : _____

Client ETA Site Name _____

Cooler Received on 3-10-21 Opened on 3-10-21

Cooler unpacked by: Mathis

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-11 (CF +0.1 °C) Observed Cooler Temp. 1.1 °C Corrected Cooler Temp. 1.2 °C
   IR GUN #IR-12 (CF +0.2°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

pH Strip Lot# **HC022887**

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Released to Imaging: 5/27/2022 3:16:29 PM

Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22931.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93104-1
Address: 4955 Yarrow Street,	Due Date Requested: 4/5/2021			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/05/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6860/6860_Prep Standard 6860 list	PFC/PFC_Leach (MOD) Custom List	8330B/ISM_DD_SI_SS (MOD) DOD Sublist	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Cell 38 -BG-S-3-4-210305 (560-93104-1)	3/5/21	13:50 Central		Solid			X	X	X	2	ism subsampling is not required
Cell 34 -BG-S-3-4-210305 (560-93104-2)	3/5/21	11:10 Central		Solid			X	X	X	2	ism subsampling is not required

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Corey Kulig	3/9/21 1709	EX		3/10/21 1010	ETATEN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ✓ Yes ☐ No	Custody Seal No.: 1579094	Cooler Temperature(s) °C and Other Remarks: 4.4 IR9 CF+0.2

Ver: 11.01.2020

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22932.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93104-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 4/5/2021			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/05/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_AgChem/3546 (MOD) Copy Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Cell 38 -BG-S-3-4-210305 (560-93104-1)	3/5/21	13:50 Central		Solid			X	2	
Cell 34 -BG-S-3-4-210305 (560-93104-2)	3/5/21	11:10 Central		Solid			X	2	

Note: Since laboratory accreditations are subject to change. Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				Kathy Raney	3-10-21 940	EDA
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.8°C IR9

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93104-1

Login Number: 93104 **List Source: Eurofins TestAmerica, Corpus Christi**
List Number: 1
Creator: Tuley, Amy E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93104-1

Login Number: 93104 **List Source: Eurofins TestAmerica, Denver**
List Number: 4 **List Creation: 03/10/21 01:13 PM**
Creator: Rystrom, Joshua R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93104-1

Login Number: 93104 **List Source: Eurofins TestAmerica, Pensacola**
List Number: 2 **List Creation: 03/10/21 12:14 PM**
Creator: Avery, Kathy R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	False	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8°C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93104-1

Login Number: 93104
List Number: 3
Creator: Worthington, Sierra M

List Source: Eurofins TestAmerica, St. Louis
List Creation: 03/10/21 01:34 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2471

Laboratory Job ID: 560-93106-1
Client Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

For:
ARCADIS U.S., Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Attn: Alison Schaffer

Authorized for release by:
4/7/2021 4:03:40 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

LCMS

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Job ID: 560-93106-1

Laboratory: Eurofins Xenco, Corpus Christi

Narrative

Job Narrative
560-93106-1

Comments
No additional comments.

Receipt
The samples were received on 3/9/2021 12:18 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -0.9º C.

Receipt Exceptions

A Chain-of-Custody (COC) was not received with these samples: Cell 35 -BG-S-3-4-210308 (560-93106-1) and Cell 39 -BG-S-3-4-210308 (560-93106-2).

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-529835 and analytical batch 280-530638 were outside control limits. Sample matrix interference is suspected.

Method 8270D: The laboratory control sample and laboratory control sample duplicate (LCS/LCSD) for preparation batch 280-529835 and analytical batch 280-530638 recovered outside control limits for multiple analytes. The associated samples are outside hold time; therefore no re-extraction has been scheduled at this time. The following samples are affected: Cell 35 -BG-S-3-4-210308 (560-93106-1), Cell 39 -BG-S-3-4-210308 (560-93106-2), (LCS 280-529835/2-A), (LCSD 280-529835/3-A), (560-93106-L-1-B MS) and (560-93106-L-1-C MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 240-476383 and analytical batch 240-476838 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8081A: The laboratory control sample (LCS) for preparation batch 240-476383 and analytical batch 240-476838 recovered outside control limits for the following analyte: Endosulfan sulfate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

RAD
Methods 901.1, GA-01-R: Gamma Prep Batch 160-502083

Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from	Reported to Analyte
Th-234	Pa-234
Th-234	U-238
Pb-210	Po-210

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Job ID: 560-93106-1 (Continued)

Laboratory: Eurofins Xenco, Corpus Christi (Continued)

Pb-210	Bi-210
Cs-137	Ba-137m
Pb-212	Po-216
Xe-131m	Xe-131
Sb-125	Te-125m
Ag-108m	Ag-108
Rh-106	Ru-106
Pb-212	Th-228
Pb-212	Ra-224
U-235	Th-231
Ac-228	Th-232
Ac-228	Ra-228
Th-227	Ra-223
Th-227	Ac-227
Th-227	Bi-211
Th-227	Pb-211
Bi-214	Ra-226

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

Cell 35 -BG-S-3-4-210308 (560-93106-1), Cell 39 -BG-S-3-4-210308 (560-93106-2), (LCS 160-502083/2-A), (MB 160-502083/1-A) and (560-93106-C-1-C DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6020: Due to the high concentration of iron, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-501560 and analytical batch 160-502417 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.(560-93104-B-1-B MS ^2) and (560-93104-B-1-C MSD ^2)

Method 6020: analytical batch 160-502417 The internal standard was outside QC limits in the CCV. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported. (CCV 160-502417/54)

Method 6020: The post digestion spike % recovery for iron associated with batch preparation batch 160-501560 and analytical batch 160-502417 was outside of control limits. The associated sample is: (560-93104-B-1-A PDS ^2).

Methods 6020, 6020A, 6020B: preparation batch 160-501560 and analytical batch 160-502614 The following sample was diluted due to the abundance of salts: (560-93104-B-1-A ^5). Elevated reporting limits (RLs) are provided.

Method 6020: preparation batch 160-501560 and analytical batch 160-502614 The following samples were diluted to bring the concentration of target analytes within the calibration range: Cell 35 -BG-S-3-4-210308 (560-93106-1) and Cell 39 -BG-S-3-4-210308 (560-93106-2). Elevated reporting limits (RLs) are provided.

Method 6020: The post digestion spike % recovery for barium associated with batch preparation batch 160-501560 and analytical batch 160-502614 was outside of control limits. The associated sample is: (560-93104-B-1-A PDS ^5).

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-501560 and analytical batch 160-502614 were outside control limits for antimony. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.(560-93104-B-1-B MS ^5) and (560-93104-B-1-C MSD ^5)

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Job ID: 560-93106-1 (Continued)

Laboratory: Eurofins Xenco, Corpus Christi (Continued)

Method 6020: preparation batch 160-501560 and analytical batch 160-502417
The internal standard was outside QC limits in the method blank. All analytes were within acceptable limits, showing that there was no bias. Original results will be reported. (MB 160-501560/1-A ^2)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 9045D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Cell 35 -BG-S-3-4-210308 (560-93106-1), Cell 39 -BG-S-3-4-210308 (560-93106-2) and (560-93104-A-1).

Method SM 2540C: The following samples were prepared outside of preparation holding time due to limited lab equipment to perform leach method in : Cell 35 -BG-S-3-4-210308 (560-93106-1), Cell 39 -BG-S-3-4-210308 (560-93106-2) and (560-93104-A-1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 6860: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: The samples arrived in clear glass containers but the SOP requires amber glass containers.

Cell 35 -BG-S-3-4-210308 (560-93106-1) and Cell 39 -BG-S-3-4-210308 (560-93106-2)

6860

preparation batch 280-528801

Methods Increment, prep: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: As requested in the method comments, the ISM subsampling portion of the ISM prep process was not performed on Cell 35 -BG-S-3-4-210308 (560-93106-1), Cell 39 -BG-S-3-4-210308 (560-93106-2), (560-93106-F-1 DU) and (560-93106-F-1 TRL) in preparation batch 280-528815 by ISM_DD_SI_SS for 8330B_Sonc_10g / 8330B.

Methods Increment, prep: The following samples were air dried and sieved per the procedure; however, the samples contained material that would not pass through the sieve: Cell 35 -BG-S-3-4-210308 (560-93106-1), Cell 39 -BG-S-3-4-210308 (560-93106-2), (560-93106-F-1 DU) and (560-93106-F-1 TRL). This material was removed and not extracted. The non-soil material is described in the aliquot worksheet. In preparation batch 280-528815 by ISM_DD_SI_SS for 8330P_Sonc_10g/8330B.

Method 3546: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: Cell 35 -BG-S-3-4-210308 (560-93106-1) and Cell 39 -BG-S-3-4-210308 (560-93106-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308 Lab Sample ID: 560-93106-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di (2-ethylhexyl)phthalate	0.0537	J	0.311	0.0434	mg/Kg	1		8270D	Total/NA
Perchlorate	0.156	J	0.472	0.0778	ug/Kg	1		6860	Total/NA
Arsenic	3.37		0.894	0.358	mg/Kg	2		6020	Total/NA
Barium	501		4.47	1.12	mg/Kg	5		6020	Total/NA
Beryllium	0.116		0.0894	0.0358	mg/Kg	2		6020	Total/NA
Cadmium	0.0576		0.0447	0.0215	mg/Kg	2		6020	Total/NA
Chromium	2.05		0.894	0.403	mg/Kg	2		6020	Total/NA
Iron	1890		10.7	5.37	mg/Kg	2		6020	Total/NA
Copper	1.14		0.894	0.358	mg/Kg	2		6020	Total/NA
Manganese	22.9		0.447	0.179	mg/Kg	2		6020	Total/NA
Lead	1.44		0.268	0.112	mg/Kg	2		6020	Total/NA
Zinc	4.52		4.47	1.79	mg/Kg	2		6020	Total/NA
Uranium	0.461		0.0894	0.0358	mg/Kg	2		6020	Total/NA
Mercury	0.0179	J b	0.0322	0.0107	mg/Kg	1		7471A	Total/NA
pH	8.3	HF	0.1	0.1	SU	1		9045D	Total/NA
Chloride	12.4		9.95	4.91	mg/Kg	1		9056A	Soluble
Fluoride	5.57		0.498	0.332	mg/Kg	1		9056A	Soluble
Nitrate as N	1.52	J	4.98	1.40	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	1.52	J b	4.98	0.275	mg/Kg	1		9056A	Soluble
Sulfate	49.5		9.95	3.87	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	112	H	10.0	10.0	mg/L	1		SM 2540C	7 Day Leach

Client Sample ID: Cell 39 -BG-S-3-4-210308 Lab Sample ID: 560-93106-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perchlorate	0.142	J	0.496	0.0817	ug/Kg	1		6860	Total/NA
Arsenic	2.78		0.855	0.342	mg/Kg	2		6020	Total/NA
Barium	334		4.27	1.07	mg/Kg	5		6020	Total/NA
Beryllium	0.171		0.0855	0.0342	mg/Kg	2		6020	Total/NA
Cadmium	0.0669		0.0427	0.0205	mg/Kg	2		6020	Total/NA
Chromium	3.12		0.855	0.385	mg/Kg	2		6020	Total/NA
Iron	3080		10.3	5.13	mg/Kg	2		6020	Total/NA
Copper	1.80		0.855	0.342	mg/Kg	2		6020	Total/NA
Manganese	39.4		0.427	0.171	mg/Kg	2		6020	Total/NA
Lead	2.29		0.256	0.107	mg/Kg	2		6020	Total/NA
Zinc	7.10		4.27	1.71	mg/Kg	2		6020	Total/NA
Uranium	0.420		0.0855	0.0342	mg/Kg	2		6020	Total/NA
Mercury	0.0256	J b	0.0303	0.0101	mg/Kg	1		7471A	Total/NA
pH	8.3	HF	0.1	0.1	SU	1		9045D	Total/NA
Phenols, Total	0.408	J	0.992	0.335	mg/Kg	1		9065	Total/NA
Chloride	11.0		9.91	4.89	mg/Kg	1		9056A	Soluble
Nitrite as N	0.884	J b	4.96	0.859	mg/Kg	1		9056A	Soluble
Fluoride	5.79		0.496	0.331	mg/Kg	1		9056A	Soluble
Nitrate as N	2.83	J	4.96	1.39	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	3.71	J b	4.96	0.274	mg/Kg	1		9056A	Soluble
Sulfate	52.4		9.91	3.86	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	141	H	10.0	10.0	mg/L	1		SM 2540C	7 Day Leach

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Corpus Christi

Released to Imaging: 5/27/2022 3:16:29 PM

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308 Lab Sample ID: 560-93106-1

Date Collected: 03/08/21 12:35 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.730	U	5.00	0.730	ug/Kg			03/10/21 12:46	1
Chloromethane	1.20	U	5.00	1.20	ug/Kg			03/10/21 12:46	1
Vinyl chloride	0.600	U	5.00	0.600	ug/Kg			03/10/21 12:46	1
Bromomethane	1.10	U	5.00	1.10	ug/Kg			03/10/21 12:46	1
Trichlorofluoromethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
Acrolein	8.60	U	50.0	8.60	ug/Kg			03/10/21 12:46	1
1,1-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
trans-1,2-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
Methyl tert-butyl ether	0.610	U	5.00	0.610	ug/Kg			03/10/21 12:46	1
1,3-Dichlorobenzene	0.310	U	5.00	0.310	ug/Kg			03/10/21 12:46	1
Methylene Chloride	5.00	U	25.0	5.00	ug/Kg			03/10/21 12:46	1
Acrylonitrile	3.60	U	50.0	3.60	ug/Kg			03/10/21 12:46	1
cis-1,2-Dichloroethene	0.570	U	5.00	0.570	ug/Kg			03/10/21 12:46	1
Carbon tetrachloride	0.510	U	5.00	0.510	ug/Kg			03/10/21 12:46	1
Benzene	0.630	U	5.00	0.630	ug/Kg			03/10/21 12:46	1
1,2-Dichloroethane	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:46	1
Trichloroethene	0.280	U	5.00	0.280	ug/Kg			03/10/21 12:46	1
1,1,1-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
1,1-Dichloroethane	0.590	U	5.00	0.590	ug/Kg			03/10/21 12:46	1
1,2-Dichloropropane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/10/21 12:46	1
Chloroform	0.870	U	5.00	0.870	ug/Kg			03/10/21 12:46	1
Bromodichloromethane	0.200	U	5.00	0.200	ug/Kg			03/10/21 12:46	1
1,1-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:46	1
cis-1,3-Dichloropropene	0.450	U	5.00	0.450	ug/Kg			03/10/21 12:46	1
Toluene	0.900	U	5.00	0.900	ug/Kg			03/10/21 12:46	1
trans-1,3-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:46	1
1,1,2-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
Tetrachloroethene	0.740	U	5.00	0.740	ug/Kg			03/10/21 12:46	1
1,3-Dichloropropene, Total	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:46	1
1,2-Dibromoethane	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:46	1
Monochlorobenzene	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:46	1
Ethylbenzene	0.450	U	5.00	0.450	ug/Kg			03/10/21 12:46	1
Xylenes, Total	0.500	U	10.0	0.500	ug/Kg			03/10/21 12:46	1
Styrene	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:46	1
Tribromomethane	0.510	U	5.00	0.510	ug/Kg			03/10/21 12:46	1
1,1,2,2-Tetrachloroethane	0.380	U	5.00	0.380	ug/Kg			03/10/21 12:46	1
1,4-Dichlorobenzene	0.320	U	5.00	0.320	ug/Kg			03/10/21 12:46	1
1,2-Dichlorobenzene	0.250	U	5.00	0.250	ug/Kg			03/10/21 12:46	1
1,2,4-Trichlorobenzene	0.970	U	5.00	0.970	ug/Kg			03/10/21 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*65 - 152*		*03/10/21 12:46*	*1*
Toluene-d8 (Surr)	*100*		*65 - 139*		*03/10/21 12:46*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.2	11.9	ug/Kg		03/16/21 09:20	03/19/21 17:07	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308 Lab Sample ID: 560-93106-1

Date Collected: 03/08/21 12:35 **Matrix: Solid**
Date Received: 03/09/21 12:18

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	97		30 - 164	03/16/21 09:20	03/19/21 17:07	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00972	U *	0.311	0.00972	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Acenaphthylene	0.0775	U *	0.311	0.0775	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Anthracene	0.0160	U	0.311	0.0160	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzidine	0.934	U	3.11	0.934	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzo[a]anthracene	0.0189	U	0.311	0.0189	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzo[b]fluoranthene	0.0247	U	0.311	0.0247	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzo[k]fluoranthene	0.0377	U	0.311	0.0377	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzo[g,h,i]perylene	0.0151	U	0.311	0.0151	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzo[a]pyrene	0.0189	U	0.311	0.0189	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Bis(2-chloroethyl)ether	0.0157	U *	0.311	0.0157	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Di (2-ethylhexyl)phthalate	**0.0537**	**J**	0.311	0.0434	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Chrysene	0.0255	U	0.311	0.0255	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dibenz(a,h)anthracene	0.0179	U	0.311	0.0179	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dichlorobenzidine, 3,3'-	0.0849	U	0.623	0.0849	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Diethyl phthalate	0.0245	U	0.623	0.0245	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dimethyl phthalate	0.0217	U *	0.311	0.0217	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dibutylphthalate	0.0274	U	0.311	0.0274	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
2,4-Dinitrotoluene	0.0623	U	0.311	0.0623	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
2,6-Dinitrotoluene	0.0264	U *	0.311	0.0264	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0208	U	0.311	0.0208	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Fluoranthene	0.0340	U	0.311	0.0340	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Fluorene	0.0170	U	0.311	0.0170	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Hexachlorobenzene	0.0274	U	0.311	0.0274	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Hexachlorobutadiene	0.00943	U *	0.311	0.00943	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Hexachlorocyclopentadiene	0.105	U	1.51	0.105	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Hexachloroethane	0.0201	U *	0.311	0.0201	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Indeno[1,2,3-cd]pyrene	0.0208	U	0.311	0.0208	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Isophorone	0.0160	U *	0.311	0.0160	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
1-Methylnaphthalene	0.0106	U *	0.311	0.0106	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
2-Methylnaphthalene	0.0179	U *	0.311	0.0179	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Naphthalene	0.0292	U *	0.311	0.0292	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Nitrobenzene	0.0208	U *	0.311	0.0208	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
N-Nitrosodi-n-butylamine	0.0912	U	0.311	0.0912	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
N-Nitrosodiethylamine	0.0613	U	0.311	0.0613	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
N-Nitrosodimethylamine	0.0349	U *	0.311	0.0349	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
N-Nitrosodiphenylamine	0.0198	U	0.311	0.0198	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
N-Nitrosopyrrolidine	0.0604	U	0.311	0.0604	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Pentachlorobenzene	0.0613	U	0.311	0.0613	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Phenanthrene	0.0160	U	0.311	0.0160	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Pyrene	0.0114	U	0.311	0.0114	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
1,2,4,5-Tetrachlorobenzene	0.0462	U *	0.311	0.0462	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
2,4-Dichlorophenol	0.00943	U *	0.311	0.00943	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dinitrophenols	0.314	U	1.51	0.314	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dinitro-o-cresol	0.311	U	1.51	0.311	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Pentachlorophenol	0.311	U	1.51	0.311	mg/Kg		03/22/21 09:29	03/28/21 03:10	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308 Lab Sample ID: 560-93106-1

Date Collected: 03/08/21 12:35 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.00943	U	0.311	0.00943	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
2,4,5-Trichlorophenol	0.00943	U	0.311	0.00943	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Atrazine	0.0349	U	0.311	0.0349	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
bis (2-chloroisopropyl) ether	0.0217	U	0.311	0.0217	mg/Kg		03/22/21 09:29	03/28/21 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*62*		*46 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*
2-Fluorobiphenyl	*61*		*46 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*
Terphenyl-d14	*87*		*46 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*
Phenol-d5 (Surr)	*62*		*46 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*
2-Fluorophenol	*64*		*43 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*
2,4,6-Tribromophenol	*73*		*35 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0652	U	0.102	0.0652	mg/Kg		03/11/21 09:04	03/11/21 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*89*		*20 - 140*	*03/11/21 09:04*	*03/11/21 20:34*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	36.2	U	52.3	36.2	mg/Kg		03/12/21 07:33	03/16/21 19:35	1
C28-C36	36.2	U	52.3	36.2	mg/Kg		03/12/21 07:33	03/16/21 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*51*		*39 - 120*	*03/12/21 07:33*	*03/16/21 19:35*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.879	U	4.83	0.879	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Hexachlorocyclohexane, gamma-	1.73	U	4.83	1.73	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Hexachlorocyclohexane, beta-	1.67	U	4.83	1.67	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Hexachlorocyclohexane, delta-	1.63	U	4.83	1.63	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Heptachlor	1.53	U	4.83	1.53	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Aldrin	0.744	U	4.83	0.744	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Heptachlor epoxide	1.39	U	4.83	1.39	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Endosulfan I	1.16	U	4.83	1.16	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Dieldrin	1.06	U	4.83	1.06	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Endrin	1.84	U	4.83	1.84	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Endosulfan II	1.43	U	4.83	1.43	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
DDT	1.09	U	4.83	1.09	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Endrin aldehyde	1.27	U	4.83	1.27	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Endosulfan sulfate	1.24	U *	4.83	1.24	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Chlordane (technical)	11.6	U	48.3	11.6	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Toxaphene	24.2	U	96.6	24.2	ug/Kg		03/11/21 08:26	03/15/21 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*30 - 120*	*03/11/21 08:26*	*03/15/21 21:02*	*1*
DCB Decachlorobiphenyl	*86*		*13 - 135*	*03/11/21 08:26*	*03/15/21 21:02*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308 Lab Sample ID: 560-93106-1

Date Collected: 03/08/21 12:35 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1221	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1232	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1242	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1248	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1254	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1260	0.00991	U	0.0327	0.00991	mg/Kg		03/19/21 07:31	03/19/21 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*32 - 132*	*03/19/21 07:31*	*03/19/21 20:56*	*1*
DCB Decachlorobiphenyl	*70*		*57 - 138*	*03/19/21 07:31*	*03/19/21 20:56*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U	0.0940	0.0213	mg/Kg		03/16/21 15:34	03/18/21 10:14	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0404	U	0.188	0.0404	mg/Kg		03/16/21 15:34	03/18/21 10:14	1
2,4,6-Trinitrotoluene	0.0289	U	0.0940	0.0289	mg/Kg		03/16/21 15:34	03/18/21 10:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*		*83 - 122*	*03/16/21 15:34*	*03/18/21 10:14*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.156**	**J**	0.472	0.0778	ug/Kg		03/11/21 12:20	03/12/21 20:59	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.215	U	0.748	0.215	ug/Kg		03/16/21 13:05	04/01/21 13:19	1
Perfluorohexanesulfonic acid (PFHxS)	0.262	U	0.748	0.262	ug/Kg		03/16/21 13:05	04/01/21 13:19	1
Perfluorooctanesulfonic acid (PFOS)	0.131	U	0.748	0.131	ug/Kg		03/16/21 13:05	04/01/21 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:19*	*1*
13C8 PFOS	*103*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:19*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0671	U	0.179	0.0671	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Arsenic	**3.37**		0.894	0.358	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Barium	**501**		4.47	1.12	mg/Kg		03/11/21 10:09	03/19/21 16:42	5
Beryllium	**0.116**		0.0894	0.0358	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Cadmium	**0.0576**		0.0447	0.0215	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Chromium	**2.05**		0.894	0.403	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Iron	**1890**		10.7	5.37	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Copper	**1.14**		0.894	0.358	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Manganese	**22.9**		0.447	0.179	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Lead	**1.44**		0.268	0.112	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Antimony	0.179	U	0.447	0.179	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Selenium	0.286	U	0.447	0.286	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Thallium	0.179	U	0.447	0.179	mg/Kg		03/11/21 10:09	03/17/21 18:15	2

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308 Lab Sample ID: 560-93106-1

Date Collected: 03/08/21 12:35 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	4.52		4.47	1.79	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Uranium	0.461		0.0894	0.0358	mg/Kg		03/11/21 10:09	03/17/21 18:15	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0179	J b	0.0322	0.0107	mg/Kg		03/24/21 17:26	03/24/21 20:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.190	U	0.500	0.190	mg/Kg		03/11/21 09:04	03/11/21 11:27	1
pH	8.3	HF	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	0.335	U	0.992	0.335	mg/Kg		04/05/21 08:45	04/05/21 13:51	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.4		9.95	4.91	mg/Kg			03/18/21 13:25	1
Nitrite as N	0.863	U	4.98	0.863	mg/Kg			03/18/21 13:25	1
Fluoride	5.57		0.498	0.332	mg/Kg			03/18/21 13:25	1
Nitrate as N	1.52	J	4.98	1.40	mg/Kg			03/18/21 13:25	1
Nitrate Nitrite as N	1.52	J b	4.98	0.275	mg/Kg			03/18/21 13:25	1
Sulfate	49.5		9.95	3.87	mg/Kg			03/18/21 13:25	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	112	H	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.895		0.192	0.213	1.00	0.134	pCi/g	03/16/21 15:31	04/06/21 07:52	1
Radium-228	0.0895	U	0.194	0.194		0.362	pCi/g	03/16/21 15:31	04/06/21 07:52	1
Combined Radium 226 + 228	0.985		0.273	0.288		0.362	pCi/g	03/16/21 15:31	04/06/21 07:52	1

Client Sample ID: Cell 39 -BG-S-3-4-210308 Lab Sample ID: 560-93106-2

Date Collected: 03/08/21 15:45 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.729	U	4.99	0.729	ug/Kg			03/10/21 13:12	1
Chloromethane	1.20	U	4.99	1.20	ug/Kg			03/10/21 13:12	1
Vinyl chloride	0.599	U	4.99	0.599	ug/Kg			03/10/21 13:12	1
Bromomethane	1.10	U	4.99	1.10	ug/Kg			03/10/21 13:12	1
Trichlorofluoromethane	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
Acrolein	8.58	U	49.9	8.58	ug/Kg			03/10/21 13:12	1
1,1-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
trans-1,2-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
Methyl tert-butyl ether	0.609	U	4.99	0.609	ug/Kg			03/10/21 13:12	1
1,3-Dichlorobenzene	0.309	U	4.99	0.309	ug/Kg			03/10/21 13:12	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 39 -BG-S-3-4-210308
Lab Sample ID: 560-93106-2
Date Collected: 03/08/21 15:45
Matrix: Solid
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	4.99	U	25.0	4.99	ug/Kg			03/10/21 13:12	1
Acrylonitrile	3.59	U	49.9	3.59	ug/Kg			03/10/21 13:12	1
cis-1,2-Dichloroethene	0.569	U	4.99	0.569	ug/Kg			03/10/21 13:12	1
Carbon tetrachloride	0.509	U	4.99	0.509	ug/Kg			03/10/21 13:12	1
Benzene	0.629	U	4.99	0.629	ug/Kg			03/10/21 13:12	1
1,2-Dichloroethane	0.519	U	4.99	0.519	ug/Kg			03/10/21 13:12	1
Trichloroethene	0.279	U	4.99	0.279	ug/Kg			03/10/21 13:12	1
1,1,1-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
1,1-Dichloroethane	0.589	U	4.99	0.589	ug/Kg			03/10/21 13:12	1
1,2-Dichloropropane	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
1,4-Dioxane	19.0	U	99.8	19.0	ug/Kg			03/10/21 13:12	1
Chloroform	0.868	U	4.99	0.868	ug/Kg			03/10/21 13:12	1
Bromodichloromethane	0.200	U	4.99	0.200	ug/Kg			03/10/21 13:12	1
1,1-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/10/21 13:12	1
cis-1,3-Dichloropropene	0.449	U	4.99	0.449	ug/Kg			03/10/21 13:12	1
Toluene	0.898	U	4.99	0.898	ug/Kg			03/10/21 13:12	1
trans-1,3-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/10/21 13:12	1
1,1,2-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
Tetrachloroethene	0.739	U	4.99	0.739	ug/Kg			03/10/21 13:12	1
1,3-Dichloropropene, Total	0.519	U	4.99	0.519	ug/Kg			03/10/21 13:12	1
1,2-Dibromoethane	0.299	U	4.99	0.299	ug/Kg			03/10/21 13:12	1
Monochlorobenzene	0.299	U	4.99	0.299	ug/Kg			03/10/21 13:12	1
Ethylbenzene	0.449	U	4.99	0.449	ug/Kg			03/10/21 13:12	1
Xylenes, Total	0.499	U	9.98	0.499	ug/Kg			03/10/21 13:12	1
Styrene	0.299	U	4.99	0.299	ug/Kg			03/10/21 13:12	1
Tribromomethane	0.509	U	4.99	0.509	ug/Kg			03/10/21 13:12	1
1,1,2,2-Tetrachloroethane	0.379	U	4.99	0.379	ug/Kg			03/10/21 13:12	1
1,4-Dichlorobenzene	0.319	U	4.99	0.319	ug/Kg			03/10/21 13:12	1
1,2-Dichlorobenzene	0.250	U	4.99	0.250	ug/Kg			03/10/21 13:12	1
1,2,4-Trichlorobenzene	0.968	U	4.99	0.968	ug/Kg			03/10/21 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*65 - 152*		*03/10/21 13:12*	*1*
Toluene-d8 (Surr)	*99*		*65 - 139*		*03/10/21 13:12*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.8	U	65.0	11.8	ug/Kg		03/16/21 09:20	03/19/21 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*96*		*30 - 164*	*03/16/21 09:20*	*03/19/21 17:31*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00942	U *	0.302	0.00942	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Acenaphthylene	0.0751	U *	0.302	0.0751	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Anthracene	0.0155	U	0.302	0.0155	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Benzidine	0.905	U	3.02	0.905	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Benzo[a]anthracene	0.0183	U	0.302	0.0183	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Benzo[b]fluoranthene	0.0240	U	0.302	0.0240	mg/Kg		03/22/21 09:29	03/28/21 05:10	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 39 -BG-S-3-4-210308 **Lab Sample ID: 560-93106-2**
Date Collected: 03/08/21 15:45 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.0366	U	0.302	0.0366	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Benzo[g,h,i]perylene	0.0146	U	0.302	0.0146	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Benzo[a]pyrene	0.0183	U	0.302	0.0183	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Bis(2-chloroethyl)ether	0.0152	U *	0.302	0.0152	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Di (2-ethylhexyl)phthalate	0.0421	U	0.302	0.0421	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Chrysene	0.0247	U	0.302	0.0247	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dibenz(a,h)anthracene	0.0174	U	0.302	0.0174	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dichlorobenzidine, 3,3'-	0.0823	U	0.604	0.0823	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Diethyl phthalate	0.0238	U	0.604	0.0238	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dimethyl phthalate	0.0210	U *	0.302	0.0210	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dibutylphthalate	0.0265	U	0.302	0.0265	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2,4-Dinitrotoluene	0.0604	U	0.302	0.0604	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2,6-Dinitrotoluene	0.0256	U *	0.302	0.0256	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0201	U	0.302	0.0201	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Fluoranthene	0.0329	U	0.302	0.0329	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Fluorene	0.0165	U	0.302	0.0165	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Hexachlorobenzene	0.0265	U	0.302	0.0265	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Hexachlorobutadiene	0.00915	U *	0.302	0.00915	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Hexachlorocyclopentadiene	0.102	U	1.46	0.102	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Hexachloroethane	0.0195	U *	0.302	0.0195	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Indeno[1,2,3-cd]pyrene	0.0201	U	0.302	0.0201	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Isophorone	0.0155	U *	0.302	0.0155	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
1-Methylnaphthalene	0.0102	U *	0.302	0.0102	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2-Methylnaphthalene	0.0174	U *	0.302	0.0174	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Naphthalene	0.0284	U *	0.302	0.0284	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Nitrobenzene	0.0201	U *	0.302	0.0201	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
N-Nitrosodi-n-butylamine	0.0884	U	0.302	0.0884	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
N-Nitrosodiethylamine	0.0595	U	0.302	0.0595	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
N-Nitrosodimethylamine	0.0338	U *	0.302	0.0338	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
N-Nitrosodiphenylamine	0.0192	U	0.302	0.0192	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
N-Nitrosopyrrolidine	0.0585	U	0.302	0.0585	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Pentachlorobenzene	0.0595	U	0.302	0.0595	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Phenanthrene	0.0155	U	0.302	0.0155	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Pyrene	0.0111	U	0.302	0.0111	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
1,2,4,5-Tetrachlorobenzene	0.0448	U *	0.302	0.0448	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2,4-Dichlorophenol	0.00915	U *	0.302	0.00915	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dinitrophenols	0.305	U	1.46	0.305	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dinitro-o-cresol	0.302	U	1.46	0.302	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Pentachlorophenol	0.302	U	1.46	0.302	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2,4,6-Trichlorophenol	0.00915	U	0.302	0.00915	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2,4,5-Trichlorophenol	0.00915	U	0.302	0.00915	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Atrazine	0.0338	U	0.302	0.0338	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
bis (2-chloroisopropyl) ether	0.0210	U	0.302	0.0210	mg/Kg		03/22/21 09:29	03/28/21 05:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*61*		*46 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*
2-Fluorobiphenyl	*63*		*46 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*
Terphenyl-d14	*84*		*46 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*
Phenol-d5 (Surr)	*67*		*46 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 39 -BG-S-3-4-210308 Lab Sample ID: 560-93106-2

Date Collected: 03/08/21 15:45 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*67*		*43 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*
2,4,6-Tribromophenol	*65*		*35 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0632	U	0.0984	0.0632	mg/Kg		03/11/21 09:04	03/11/21 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*76*		*20 - 140*	*03/11/21 09:04*	*03/11/21 21:10*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.7	U	50.2	34.7	mg/Kg		03/12/21 07:33	03/16/21 20:02	1
C28-C36	34.7	U	50.2	34.7	mg/Kg		03/12/21 07:33	03/16/21 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*86*		*39 - 120*	*03/12/21 07:33*	*03/16/21 20:02*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.906	U	4.98	0.906	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Hexachlorocyclohexane, gamma-	1.78	U	4.98	1.78	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Hexachlorocyclohexane, beta-	1.72	U	4.98	1.72	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Hexachlorocyclohexane, delta-	1.68	U	4.98	1.68	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Heptachlor	1.57	U	4.98	1.57	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Aldrin	0.767	U	4.98	0.767	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Heptachlor epoxide	1.43	U	4.98	1.43	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Endosulfan I	1.20	U	4.98	1.20	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Dieldrin	1.10	U	4.98	1.10	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Endrin	1.89	U	4.98	1.89	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Endosulfan II	1.47	U	4.98	1.47	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
DDT	1.13	U	4.98	1.13	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Endrin aldehyde	1.30	U	4.98	1.30	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Endosulfan sulfate	1.27	U *	4.98	1.27	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Chlordane (technical)	12.0	U	49.8	12.0	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Toxaphene	24.9	U	99.6	24.9	ug/Kg		03/11/21 08:26	03/15/21 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 120*	*03/11/21 08:26*	*03/15/21 21:15*	*1*
DCB Decachlorobiphenyl	*95*		*13 - 135*	*03/11/21 08:26*	*03/15/21 21:15*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1221	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1232	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1242	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1248	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1254	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1260	0.00994	U	0.0328	0.00994	mg/Kg		03/19/21 07:31	03/19/21 21:19	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 39 -BG-S-3-4-210308 Lab Sample ID: 560-93106-2

Date Collected: 03/08/21 15:45 **Matrix: Solid**
Date Received: 03/09/21 12:18

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*32 - 132*	*03/19/21 07:31*	*03/19/21 21:19*	*1*
DCB Decachlorobiphenyl	*78*		*57 - 138*	*03/19/21 07:31*	*03/19/21 21:19*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0221	U	0.0974	0.0221	mg/Kg		03/16/21 15:34	03/18/21 11:23	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0419	U	0.195	0.0419	mg/Kg		03/16/21 15:34	03/18/21 11:23	1
2,4,6-Trinitrotoluene	0.0299	U	0.0974	0.0299	mg/Kg		03/16/21 15:34	03/18/21 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 11:23*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.142**	**J**	0.496	0.0817	ug/Kg		03/11/21 12:20	03/12/21 21:04	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.214	U	0.746	0.214	ug/Kg		03/16/21 13:05	04/01/21 13:28	1
Perfluorohexanesulfonic acid (PFHxS)	0.261	U	0.746	0.261	ug/Kg		03/16/21 13:05	04/01/21 13:28	1
Perfluorooctanesulfonic acid (PFOS)	0.130	U	0.746	0.130	ug/Kg		03/16/21 13:05	04/01/21 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*99*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:28*	*1*
13C8 PFOS	*104*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:28*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0641	U	0.171	0.0641	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Arsenic	**2.78**		0.855	0.342	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Barium	**334**		4.27	1.07	mg/Kg		03/11/21 10:09	03/19/21 16:46	5
Beryllium	**0.171**		0.0855	0.0342	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Cadmium	**0.0669**		0.0427	0.0205	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Chromium	**3.12**		0.855	0.385	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Iron	**3080**		10.3	5.13	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Copper	**1.80**		0.855	0.342	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Manganese	**39.4**		0.427	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Lead	**2.29**		0.256	0.107	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Antimony	0.171	U	0.427	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Selenium	0.274	U	0.427	0.274	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Thallium	0.171	U	0.427	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Zinc	**7.10**		4.27	1.71	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Uranium	**0.420**		0.0855	0.0342	mg/Kg		03/11/21 10:09	03/17/21 18:18	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0256**	**J b**	0.0303	0.0101	mg/Kg		03/24/21 17:26	03/24/21 20:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.183	U	0.481	0.183	mg/Kg		03/11/21 09:04	03/11/21 11:29	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 39 -BG-S-3-4-210308
Lab Sample ID: 560-93106-2
Date Collected: 03/08/21 15:45
Matrix: Solid
Date Received: 03/09/21 12:18

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3	HF	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	0.408	J	0.992	0.335	mg/Kg		04/05/21 08:45	04/05/21 13:55	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.0		9.91	4.89	mg/Kg			03/18/21 13:47	1
Nitrite as N	0.884	J b	4.96	0.859	mg/Kg			03/18/21 13:47	1
Fluoride	5.79		0.496	0.331	mg/Kg			03/18/21 13:47	1
Nitrate as N	2.83	J	4.96	1.39	mg/Kg			03/18/21 13:47	1
Nitrate Nitrite as N	3.71	J b	4.96	0.274	mg/Kg			03/18/21 13:47	1
Sulfate	52.4		9.91	3.86	mg/Kg			03/18/21 13:47	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	141	H	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.677		0.124	0.143	1.00	0.0808	pCi/g	03/16/21 15:31	04/06/21 08:13	1
Radium-228	0.219		0.0994	0.102		0.142	pCi/g	03/16/21 15:31	04/06/21 08:13	1
Combined Radium 226 + 228	0.897		0.159	0.176		0.142	pCi/g	03/16/21 15:31	04/06/21 08:13	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 560-183466/7
Matrix: Solid
Analysis Batch: 183466

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.730	U	5.00	0.730	ug/Kg			03/10/21 12:21	1
Chloromethane	1.20	U	5.00	1.20	ug/Kg			03/10/21 12:21	1
Vinyl chloride	0.600	U	5.00	0.600	ug/Kg			03/10/21 12:21	1
Bromomethane	1.10	U	5.00	1.10	ug/Kg			03/10/21 12:21	1
Trichlorofluoromethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
Acrolein	8.60	U	50.0	8.60	ug/Kg			03/10/21 12:21	1
1,1-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
trans-1,2-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
Methyl tert-butyl ether	0.610	U	5.00	0.610	ug/Kg			03/10/21 12:21	1
1,3-Dichlorobenzene	0.310	U	5.00	0.310	ug/Kg			03/10/21 12:21	1
Methylene Chloride	5.00	U	25.0	5.00	ug/Kg			03/10/21 12:21	1
Acrylonitrile	3.60	U	50.0	3.60	ug/Kg			03/10/21 12:21	1
cis-1,2-Dichloroethene	0.570	U	5.00	0.570	ug/Kg			03/10/21 12:21	1
Carbon tetrachloride	0.510	U	5.00	0.510	ug/Kg			03/10/21 12:21	1
Benzene	0.630	U	5.00	0.630	ug/Kg			03/10/21 12:21	1
1,2-Dichloroethane	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:21	1
Trichloroethene	0.280	U	5.00	0.280	ug/Kg			03/10/21 12:21	1
1,1,1-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
1,1-Dichloroethane	0.590	U	5.00	0.590	ug/Kg			03/10/21 12:21	1
1,2-Dichloropropane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/10/21 12:21	1
Chloroform	0.870	U	5.00	0.870	ug/Kg			03/10/21 12:21	1
Bromodichloromethane	0.200	U	5.00	0.200	ug/Kg			03/10/21 12:21	1
1,1-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:21	1
cis-1,3-Dichloropropene	0.450	U	5.00	0.450	ug/Kg			03/10/21 12:21	1
Toluene	0.900	U	5.00	0.900	ug/Kg			03/10/21 12:21	1
trans-1,3-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:21	1
1,1,2-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:21	1
Tetrachloroethene	0.740	U	5.00	0.740	ug/Kg			03/10/21 12:21	1
1,3-Dichloropropene, Total	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:21	1
1,2-Dibromoethane	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:21	1
Monochlorobenzene	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:21	1
Ethylbenzene	0.450	U	5.00	0.450	ug/Kg			03/10/21 12:21	1
Xylenes, Total	0.500	U	10.0	0.500	ug/Kg			03/10/21 12:21	1
Styrene	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:21	1
Tribromomethane	0.510	U	5.00	0.510	ug/Kg			03/10/21 12:21	1
1,1,2,2-Tetrachloroethane	0.380	U	5.00	0.380	ug/Kg			03/10/21 12:21	1
1,4-Dichlorobenzene	0.320	U	5.00	0.320	ug/Kg			03/10/21 12:21	1
1,2-Dichlorobenzene	0.250	U	5.00	0.250	ug/Kg			03/10/21 12:21	1
1,2,4-Trichlorobenzene	0.970	U	5.00	0.970	ug/Kg			03/10/21 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*65 - 152*		*03/10/21 12:21*	*1*
Toluene-d8 (Surr)	*100*		*65 - 139*		*03/10/21 12:21*	*1*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 560-183466/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	40.0	31.97		ug/Kg		80	13 - 130
Chloromethane	40.0	46.59		ug/Kg		116	61 - 137
Vinyl chloride	40.0	39.51		ug/Kg		99	65 - 139
Bromomethane	40.0	34.17		ug/Kg		85	57 - 155
Trichlorofluoromethane	40.0	36.98		ug/Kg		92	68 - 146
Acrolein	395	423.7		ug/Kg		107	20 - 150
1,1-Dichloroethene	40.0	44.63		ug/Kg		112	70 - 130
trans-1,2-Dichloroethene	40.0	44.70		ug/Kg		112	70 - 132
Methyl tert-butyl ether	40.0	40.09		ug/Kg		100	70 - 130
1,3-Dichlorobenzene	40.0	43.77		ug/Kg		109	70 - 130
Methylene Chloride	40.0	41.68		ug/Kg		104	61 - 150
Acrylonitrile	400	426.1		ug/Kg		107	66 - 137
cis-1,2-Dichloroethene	40.0	45.42		ug/Kg		114	70 - 130
Carbon tetrachloride	40.0	37.05		ug/Kg		93	70 - 136
Benzene	40.0	44.60		ug/Kg		111	70 - 131
1,2-Dichloroethane	40.0	33.01		ug/Kg		83	70 - 130
Trichloroethene	40.0	41.99		ug/Kg		105	70 - 130
1,1,1-Trichloroethane	40.0	38.88		ug/Kg		97	70 - 132
1,1-Dichloroethane	40.0	42.84		ug/Kg		107	70 - 130
1,2-Dichloropropane	40.0	44.29		ug/Kg		111	70 - 130
1,4-Dioxane	800	729.7		ug/Kg		91	10 - 150
Chloroform	40.0	39.03		ug/Kg		98	70 - 130
Bromodichloromethane	40.0	39.58		ug/Kg		99	70 - 130
1,1-Dichloropropene	40.0	46.69		ug/Kg		117	70 - 130
cis-1,3-Dichloropropene	40.0	48.70		ug/Kg		122	70 - 130
Toluene	40.0	45.39		ug/Kg		113	70 - 130
trans-1,3-Dichloropropene	40.0	40.37		ug/Kg		101	70 - 131
1,1,2-Trichloroethane	40.0	40.99		ug/Kg		102	70 - 130
Tetrachloroethene	40.0	45.07		ug/Kg		113	70 - 130
1,3-Dichloropropene, Total	80.0	89.07		ug/Kg		111	
1,2-Dibromoethane	40.0	39.69		ug/Kg		99	70 - 130
Monochlorobenzene	40.0	42.19		ug/Kg		105	70 - 130
Ethylbenzene	40.0	48.91		ug/Kg		122	70 - 130
Xylenes, Total	80.0	95.02		ug/Kg		119	70 - 130
Styrene	40.0	43.26		ug/Kg		108	70 - 130
Tribromomethane	40.0	32.98		ug/Kg		82	59 - 137
1,1,2,2-Tetrachloroethane	40.0	44.42		ug/Kg		111	70 - 130
1,4-Dichlorobenzene	40.0	42.27		ug/Kg		106	70 - 130
1,2-Dichlorobenzene	40.0	42.82		ug/Kg		107	70 - 130
1,2,4-Trichlorobenzene	40.0	46.31		ug/Kg		116	68 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*65 - 152*
Toluene-d8 (Surr)	*103*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 560-183466/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183466

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			40.0	31.73		ug/Kg		79	13 - 130	1	30.0
Chloromethane			40.0	45.25		ug/Kg		113	61 - 137	3	30.0
Vinyl chloride			40.0	39.15		ug/Kg		98	65 - 139	1	30.0
Bromomethane			40.0	35.08		ug/Kg		88	57 - 155	3	30.0
Trichlorofluoromethane			40.0	37.20		ug/Kg		93	68 - 146	1	30.0
Acrolein			395	477.3		ug/Kg		121	20 - 150	12	30.0
1,1-Dichloroethene			40.0	45.22		ug/Kg		113	70 - 130	1	30.0
trans-1,2-Dichloroethene			40.0	44.38		ug/Kg		111	70 - 132	1	30.0
Methyl tert-butyl ether			40.0	43.66		ug/Kg		109	70 - 130	9	30.0
1,3-Dichlorobenzene			40.0	45.21		ug/Kg		113	70 - 130	3	30.0
Methylene Chloride			40.0	43.54		ug/Kg		109	61 - 150	4	30.0
Acrylonitrile			400	502.8		ug/Kg		126	66 - 137	17	30.0
cis-1,2-Dichloroethene			40.0	46.85		ug/Kg		117	70 - 130	3	30.0
Carbon tetrachloride			40.0	37.10		ug/Kg		93	70 - 136	0	30.0
Benzene			40.0	46.49		ug/Kg		116	70 - 131	4	30.0
1,2-Dichloroethane			40.0	36.38		ug/Kg		91	70 - 130	10	30.0
Trichloroethene			40.0	43.03		ug/Kg		108	70 - 130	2	30.0
1,1,1-Trichloroethane			40.0	39.41		ug/Kg		99	70 - 132	1	30.0
1,1-Dichloroethane			40.0	43.69		ug/Kg		109	70 - 130	2	30.0
1,2-Dichloropropane			40.0	48.06		ug/Kg		120	70 - 130	8	30.0
1,4-Dioxane			800	959.1		ug/Kg		120	10 - 150	27	30.0
Chloroform			40.0	40.46		ug/Kg		101	70 - 130	4	30.0
Bromodichloromethane			40.0	43.05		ug/Kg		108	70 - 130	8	30.0
1,1-Dichloropropene			40.0	46.98		ug/Kg		117	70 - 130	1	30.0
cis-1,3-Dichloropropene			40.0	51.45		ug/Kg		129	70 - 130	5	30.0
Toluene			40.0	45.24		ug/Kg		113	70 - 130	0	30.0
trans-1,3-Dichloropropene			40.0	44.34		ug/Kg		111	70 - 131	9	30.0
1,1,2-Trichloroethane			40.0	45.65		ug/Kg		114	70 - 130	11	30.0
Tetrachloroethene			40.0	46.40		ug/Kg		116	70 - 130	3	30.0
1,3-Dichloropropene, Total			80.0	95.79		ug/Kg		120		7	30
1,2-Dibromoethane			40.0	44.42		ug/Kg		111	70 - 130	11	30.0
Monochlorobenzene			40.0	43.75		ug/Kg		109	70 - 130	4	30.0
Ethylbenzene			40.0	49.36		ug/Kg		123	70 - 130	1	30.0
Xylenes, Total			80.0	96.26		ug/Kg		120	70 - 130	1	30.0
Styrene			40.0	45.95		ug/Kg		115	70 - 130	6	30.0
Tribromomethane			40.0	38.07		ug/Kg		95	59 - 137	14	30.0
1,1,2,2-Tetrachloroethane			40.0	48.56		ug/Kg		121	70 - 130	9	30.0
1,4-Dichlorobenzene			40.0	43.55		ug/Kg		109	70 - 130	3	30.0
1,2-Dichlorobenzene			40.0	43.95		ug/Kg		110	70 - 130	3	30.0
1,2,4-Trichlorobenzene			40.0	47.77		ug/Kg		119	68 - 140	3	30.0

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*65 - 152*
Toluene-d8 (Surr)	*100*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8270D - Pesticides by GC/MS

Lab Sample ID: MB 400-523876/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 524066 — **Prep Batch: 523876**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	12.0	U	66.0	12.0	ug/Kg		03/16/21 09:18	03/17/21 16:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*104*		*30 - 164*	*03/16/21 09:18*	*03/17/21 16:37*	*1*

Lab Sample ID: LCS 400-523876/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 524066 — **Prep Batch: 523876**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Prometon	333	290.2		ug/Kg		87	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Triphenylphosphate	*90*		*30 - 164*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-529835/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 530638 — **Prep Batch: 529835**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U	0.330	0.0103	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Acenaphthylene	0.0821	U	0.330	0.0821	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Anthracene	0.0170	U	0.330	0.0170	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Benzidine	0.990	U	3.30	0.990	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Benzo[a]anthracene	0.0200	U	0.330	0.0200	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Benzo[b]fluoranthene	0.0262	U	0.330	0.0262	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Benzo[k]fluoranthene	0.0400	U	0.330	0.0400	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Benzo[g,h,i]perylene	0.0160	U	0.330	0.0160	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Benzo[a]pyrene	0.0200	U	0.330	0.0200	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Bis(2-chloroethyl)ether	0.0166	U	0.330	0.0166	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Di (2-ethylhexyl)phthalate	0.0460	U	0.330	0.0460	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Chrysene	0.0270	U	0.330	0.0270	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Dibenz(a,h)anthracene	0.0190	U	0.330	0.0190	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Dichlorobenzidine, 3,3'-	0.0900	U	0.660	0.0900	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Diethyl phthalate	0.0260	U	0.660	0.0260	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Dimethyl phthalate	0.0230	U	0.330	0.0230	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Dibutylphthalate	0.0290	U	0.330	0.0290	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
2,4-Dinitrotoluene	0.0660	U	0.330	0.0660	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
2,6-Dinitrotoluene	0.0280	U	0.330	0.0280	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U	0.330	0.0220	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Fluoranthene	0.0360	U	0.330	0.0360	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Fluorene	0.0180	U	0.330	0.0180	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Hexachlorobenzene	0.0290	U	0.330	0.0290	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Hexachlorobutadiene	0.0100	U	0.330	0.0100	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Hexachlorocyclopentadiene	0.111	U	1.60	0.111	mg/Kg		03/22/21 09:29	03/28/21 01:40	1

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Job ID: 560-93106-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-529835/1-A
Matrix: Solid
Analysis Batch: 530638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 529835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	0.0213	U	0.330	0.0213	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Indeno[1,2,3-cd]pyrene	0.0220	U	0.330	0.0220	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Isophorone	0.0170	U	0.330	0.0170	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
1-Methylnaphthalene	0.0112	U	0.330	0.0112	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
2-Methylnaphthalene	0.0190	U	0.330	0.0190	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Naphthalene	0.0310	U	0.330	0.0310	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Nitrobenzene	0.0220	U	0.330	0.0220	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
N-Nitrosodi-n-butylamine	0.0967	U	0.330	0.0967	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
N-Nitrosodiethylamine	0.0650	U	0.330	0.0650	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
N-Nitrosodimethylamine	0.0370	U	0.330	0.0370	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
N-Nitrosodiphenylamine	0.0210	U	0.330	0.0210	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
N-Nitrosopyrrolidine	0.0640	U	0.330	0.0640	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Pentachlorobenzene	0.0650	U	0.330	0.0650	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Phenanthrene	0.0170	U	0.330	0.0170	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Pyrene	0.0121	U	0.330	0.0121	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
1,2,4,5-Tetrachlorobenzene	0.0490	U	0.330	0.0490	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
2,4-Dichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Dinitrophenols	0.333	U	1.60	0.333	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Dinitro-o-cresol	0.330	U	1.60	0.330	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Pentachlorophenol	0.330	U	1.60	0.330	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
2,4,6-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
2,4,5-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
Atrazine	0.0370	U	0.330	0.0370	mg/Kg		03/22/21 09:29	03/28/21 01:40	1
bis (2-chloroisopropyl) ether	0.0230	U	0.330	0.0230	mg/Kg		03/22/21 09:29	03/28/21 01:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*58*		*46 - 120*	*03/22/21 09:29*	*03/28/21 01:40*	*1*
2-Fluorobiphenyl	*59*		*46 - 120*	*03/22/21 09:29*	*03/28/21 01:40*	*1*
Terphenyl-d14	*88*		*46 - 120*	*03/22/21 09:29*	*03/28/21 01:40*	*1*
Phenol-d5 (Surr)	*58*		*46 - 120*	*03/22/21 09:29*	*03/28/21 01:40*	*1*
2-Fluorophenol	*58*		*43 - 120*	*03/22/21 09:29*	*03/28/21 01:40*	*1*
2,4,6-Tribromophenol	*65*		*35 - 120*	*03/22/21 09:29*	*03/28/21 01:40*	*1*

Lab Sample ID: LCS 280-529835/2-A
Matrix: Solid
Analysis Batch: 530638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 529835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	2.67	1.576	*	mg/Kg		59	62 - 120
Acenaphthylene	2.67	1.632	*	mg/Kg		61	64 - 120
Anthracene	2.67	1.887		mg/Kg		71	66 - 120
Benzidine	5.33	1.565	J	mg/Kg		29	5 - 120
Benzo[a]anthracene	2.67	1.914		mg/Kg		72	64 - 120
Benzo[b]fluoranthene	2.67	1.931		mg/Kg		72	58 - 120
Benzo[k]fluoranthene	2.67	1.926		mg/Kg		72	62 - 120
Benzo[g,h,i]perylene	2.67	1.845		mg/Kg		69	58 - 120
Benzo[a]pyrene	2.67	1.922		mg/Kg		72	65 - 120
Bis(2-chloroethyl)ether	2.67	1.372	*	mg/Kg		51	57 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-529835/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530638 **Prep Batch: 529835**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di (2-ethylhexyl)phthalate	2.67	1.852		mg/Kg		69	65 - 120
Chrysene	2.67	1.878		mg/Kg		70	65 - 120
Dibenz(a,h)anthracene	2.67	1.825		mg/Kg		68	56 - 120
Dichlorobenzidine, 3,3'-	5.33	3.767		mg/Kg		71	22 - 120
Diethyl phthalate	2.67	1.851		mg/Kg		69	68 - 120
Dimethyl phthalate	2.67	1.743	*	mg/Kg		65	66 - 120
Dibutylphthalate	2.67	1.930		mg/Kg		72	66 - 120
2,4-Dinitrotoluene	2.67	1.851		mg/Kg		69	68 - 120
2,6-Dinitrotoluene	2.67	1.772	*	mg/Kg		66	68 - 120
1,2-Diphenylhydrazine(as Azobenzene)	2.70	1.726		mg/Kg		64	60 - 120
Fluoranthene	2.67	1.959		mg/Kg		73	64 - 120
Fluorene	2.67	1.747		mg/Kg		66	66 - 120
Hexachlorobenzene	2.67	1.843		mg/Kg		69	65 - 120
Hexachlorobutadiene	2.67	1.287	*	mg/Kg		48	58 - 120
Hexachlorocyclopentadiene	5.33	2.486		mg/Kg		47	43 - 120
Hexachloroethane	2.67	1.151	*	mg/Kg		43	56 - 120
Indeno[1,2,3-cd]pyrene	2.67	1.782		mg/Kg		67	46 - 120
Isophorone	2.67	1.392	*	mg/Kg		52	56 - 120
1-Methylnaphthalene	2.67	1.467	*	mg/Kg		55	57 - 120
2-Methylnaphthalene	2.67	1.441	*	mg/Kg		54	60 - 120
Naphthalene	2.67	1.327	*	mg/Kg		50	59 - 120
Nitrobenzene	2.67	1.289	*	mg/Kg		48	55 - 120
N-Nitrosodimethylamine	2.67	1.174	*	mg/Kg		44	50 - 120
N-Nitrosodiphenylamine	2.67	1.838		mg/Kg		69	65 - 120
Phenanthrene	2.67	1.863		mg/Kg		70	67 - 120
Pyrene	2.67	1.857		mg/Kg		70	66 - 120
1,2,4,5-Tetrachlorobenzene	2.67	1.502	*	mg/Kg		56	60 - 120
2,4-Dichlorophenol	2.67	1.585	*	mg/Kg		59	64 - 120
Dinitrophenols	5.33	3.092		mg/Kg		58	52 - 120
Dinitro-o-cresol	5.33	3.695		mg/Kg		69	60 - 120
Pentachlorophenol	5.33	3.747		mg/Kg		70	50 - 120
2,4,6-Trichlorophenol	2.67	1.779		mg/Kg		67	64 - 120
2,4,5-Trichlorophenol	2.67	1.817		mg/Kg		68	65 - 120
Atrazine	2.67	1.889		mg/Kg		71	50 - 150
bis (2-chloroisopropyl) ether	2.67	1.358		mg/Kg		51	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*55*		*46 - 120*
2-Fluorobiphenyl	*60*		*46 - 120*
Terphenyl-d14	*88*		*46 - 120*
Phenol-d5 (Surr)	*58*		*46 - 120*
2-Fluorophenol	*57*		*43 - 120*
2,4,6-Tribromophenol	*75*		*35 - 120*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-529835/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530638 **Prep Batch: 529835**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	2.67	1.681		mg/Kg		63	62 - 120	6	30
Acenaphthylene	2.67	1.678	*	mg/Kg		63	64 - 120	3	30
Anthracene	2.67	1.917		mg/Kg		72	66 - 120	2	30
Benzidine	5.33	1.453	J	mg/Kg		27	5 - 120	7	50
Benzo[a]anthracene	2.67	1.980		mg/Kg		74	64 - 120	3	30
Benzo[b]fluoranthene	2.67	1.957		mg/Kg		73	58 - 120	1	30
Benzo[k]fluoranthene	2.67	1.957		mg/Kg		73	62 - 120	2	30
Benzo[g,h,i]perylene	2.67	1.879		mg/Kg		70	58 - 120	2	30
Benzo[a]pyrene	2.67	1.940		mg/Kg		73	65 - 120	1	30
Bis(2-chloroethyl)ether	2.67	1.375	*	mg/Kg		52	57 - 120	0	30
Di (2-ethylhexyl)phthalate	2.67	1.925		mg/Kg		72	65 - 120	4	30
Chrysene	2.67	1.929		mg/Kg		72	65 - 120	3	30
Dibenz(a,h)anthracene	2.67	1.893		mg/Kg		71	56 - 120	4	30
Dichlorobenzidine, 3,3'-	5.33	3.758		mg/Kg		70	22 - 120	0	30
Diethyl phthalate	2.67	1.962		mg/Kg		74	68 - 120	6	30
Dimethyl phthalate	2.67	1.834		mg/Kg		69	66 - 120	5	30
Dibutylphthalate	2.67	1.965		mg/Kg		74	66 - 120	2	30
2,4-Dinitrotoluene	2.67	1.956		mg/Kg		73	68 - 120	6	30
2,6-Dinitrotoluene	2.67	1.847		mg/Kg		69	68 - 120	4	30
1,2-Diphenylhydrazine(as Azobenzene)	2.70	1.819		mg/Kg		67	60 - 120	5	30
Fluoranthene	2.67	2.002		mg/Kg		75	64 - 120	2	30
Fluorene	2.67	1.825		mg/Kg		68	66 - 120	4	30
Hexachlorobenzene	2.67	1.894		mg/Kg		71	65 - 120	3	30
Hexachlorobutadiene	2.67	1.328	*	mg/Kg		50	58 - 120	3	30
Hexachlorocyclopentadiene	5.33	2.489		mg/Kg		47	43 - 120	0	30
Hexachloroethane	2.67	1.193	*	mg/Kg		45	56 - 120	4	30
Indeno[1,2,3-cd]pyrene	2.67	1.919		mg/Kg		72	46 - 120	7	30
Isophorone	2.67	1.405	*	mg/Kg		53	56 - 120	1	30
1-Methylnaphthalene	2.67	1.462	*	mg/Kg		55	57 - 120	0	30
2-Methylnaphthalene	2.67	1.447	*	mg/Kg		54	60 - 120	0	30
Naphthalene	2.67	1.340	*	mg/Kg		50	59 - 120	1	30
Nitrobenzene	2.67	1.342	*	mg/Kg		50	55 - 120	4	30
N-Nitrosodimethylamine	2.67	1.243	*	mg/Kg		47	50 - 120	6	30
N-Nitrosodiphenylamine	2.67	1.843		mg/Kg		69	65 - 120	0	30
Phenanthrene	2.67	1.900		mg/Kg		71	67 - 120	2	30
Pyrene	2.67	1.912		mg/Kg		72	66 - 120	3	30
1,2,4,5-Tetrachlorobenzene	2.67	1.542	*	mg/Kg		58	60 - 120	3	30
2,4-Dichlorophenol	2.67	1.603	*	mg/Kg		60	64 - 120	1	30
Dinitrophenols	5.33	3.296		mg/Kg		62	52 - 120	6	30
Dinitro-o-cresol	5.33	3.798		mg/Kg		71	60 - 120	3	30
Pentachlorophenol	5.33	3.808		mg/Kg		71	50 - 120	2	30
2,4,6-Trichlorophenol	2.67	1.834		mg/Kg		69	64 - 120	3	30
2,4,5-Trichlorophenol	2.67	1.841		mg/Kg		69	65 - 120	1	30
Atrazine	2.67	1.912		mg/Kg		72	50 - 150	1	30
bis (2-chloroisopropyl) ether	2.67	1.310		mg/Kg		49	46 - 120	4	30

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-529835/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530638 **Prep Batch: 529835**

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Nitrobenzene-d5	55		46 - 120
2-Fluorobiphenyl	61		46 - 120
Terphenyl-d14	89		46 - 120
Phenol-d5 (Surr)	56		46 - 120
2-Fluorophenol	58		43 - 120
2,4,6-Tribromophenol	81		35 - 120

Lab Sample ID: 560-93106-1 MS **Client Sample ID: Cell 35 -BG-S-3-4-210308**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530638 **Prep Batch: 529835**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.00972	U *	2.60	1.486	N1	mg/Kg		57	62 - 120
Acenaphthylene	0.0775	U *	2.60	1.495	N1	mg/Kg		58	64 - 120
Anthracene	0.0160	U	2.60	1.609	N1	mg/Kg		62	66 - 120
Benzidine	0.934	U	5.19	1.533	J	mg/Kg		30	5 - 120
Benzo[a]anthracene	0.0189	U	2.60	1.616	N1	mg/Kg		62	64 - 120
Benzo[b]fluoranthene	0.0247	U	2.60	1.600		mg/Kg		62	58 - 120
Benzo[k]fluoranthene	0.0377	U	2.60	1.638		mg/Kg		63	62 - 120
Benzo[g,h,i]perylene	0.0151	U	2.60	1.620		mg/Kg		62	58 - 120
Benzo[a]pyrene	0.0189	U	2.60	1.595	N1	mg/Kg		61	65 - 120
Bis(2-chloroethyl)ether	0.0157	U *	2.60	1.277	N1	mg/Kg		49	57 - 120
Di (2-ethylhexyl)phthalate	0.0537	J	2.60	1.575	N1	mg/Kg		59	65 - 120
Chrysene	0.0255	U	2.60	1.584	N1	mg/Kg		61	65 - 120
Dibenz(a,h)anthracene	0.0179	U	2.60	1.518		mg/Kg		58	56 - 120
Dichlorobenzidine, 3,3'-	0.0849	U	5.19	3.478		mg/Kg		67	22 - 120
Diethyl phthalate	0.0245	U	2.60	1.635	N1	mg/Kg		63	68 - 120
Dimethyl phthalate	0.0217	U *	2.60	1.504	N1	mg/Kg		58	66 - 120
Dibutylphthalate	0.0274	U	2.60	1.618	N1	mg/Kg		62	66 - 120
2,4-Dinitrotoluene	0.0623	U	2.60	1.604	N1	mg/Kg		62	68 - 120
2,6-Dinitrotoluene	0.0264	U *	2.60	1.590	N1	mg/Kg		61	68 - 120
1,2-Diphenylhydrazine(as Azobenzene)	0.0208	U	2.63	1.513	N1	mg/Kg		58	60 - 120
Fluoranthene	0.0340	U	2.60	1.688		mg/Kg		65	64 - 120
Fluorene	0.0170	U	2.60	1.537	N1	mg/Kg		59	66 - 120
Hexachlorobenzene	0.0274	U	2.60	1.601	N1	mg/Kg		62	65 - 120
Hexachlorobutadiene	0.00943	U *	2.60	1.208	N1	mg/Kg		46	58 - 120
Hexachlorocyclopentadiene	0.105	U	5.19	2.324		mg/Kg		45	43 - 120
Hexachloroethane	0.0201	U *	2.60	1.132	N1	mg/Kg		44	56 - 120
Indeno[1,2,3-cd]pyrene	0.0208	U	2.60	1.563		mg/Kg		60	46 - 120
Isophorone	0.0160	U *	2.60	1.331	N1	mg/Kg		51	56 - 120
1-Methylnaphthalene	0.0106	U *	2.60	1.366	N1	mg/Kg		53	57 - 120
2-Methylnaphthalene	0.0179	U *	2.60	1.343	N1	mg/Kg		52	60 - 120
Naphthalene	0.0292	U *	2.60	1.250	N1	mg/Kg		48	59 - 120
Nitrobenzene	0.0208	U *	2.60	1.250	N1	mg/Kg		48	55 - 120
N-Nitrosodimethylamine	0.0349	U *	2.60	1.132	N1	mg/Kg		44	50 - 120
N-Nitrosodiphenylamine	0.0198	U	2.60	1.537	N1	mg/Kg		59	65 - 120
Phenanthrene	0.0160	U	2.60	1.580	N1	mg/Kg		61	67 - 120
Pyrene	0.0114	U	2.60	1.563	N1	mg/Kg		60	66 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 560-93106-1 MS **Client Sample ID: Cell 35 -BG-S-3-4-210308**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530638 **Prep Batch: 529835**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4,5-Tetrachlorobenzene	0.0462	U *	2.60	1.399	N1	mg/Kg		54	60 - 120
2,4-Dichlorophenol	0.00943	U *	2.60	1.460	N1	mg/Kg		56	64 - 120
Dinitrophenols	0.314	U	5.19	2.098	N1	mg/Kg		40	52 - 120
Dinitro-o-cresol	0.311	U	5.19	2.796	N1	mg/Kg		54	60 - 120
Pentachlorophenol	0.311	U	5.19	2.927		mg/Kg		56	50 - 120
2,4,6-Trichlorophenol	0.00943	U	2.60	1.625	N1	mg/Kg		63	64 - 120
2,4,5-Trichlorophenol	0.00943	U	2.60	1.614	N1	mg/Kg		62	65 - 120
Atrazine	0.0349	U	2.60	1.580		mg/Kg		61	50 - 150
bis (2-chloroisopropyl) ether	0.0217	U	2.60	1.235		mg/Kg		48	46 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*56*		*46 - 120*
2-Fluorobiphenyl	*61*		*46 - 120*
Terphenyl-d14	*78*		*46 - 120*
Phenol-d5 (Surr)	*58*		*46 - 120*
2-Fluorophenol	*57*		*43 - 120*
2,4,6-Tribromophenol	*72*		*35 - 120*

Lab Sample ID: 560-93106-1 MSD **Client Sample ID: Cell 35 -BG-S-3-4-210308**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530638 **Prep Batch: 529835**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.00972	U *	2.61	1.823		mg/Kg		70	62 - 120	20	30
Acenaphthylene	0.0775	U *	2.61	1.849		mg/Kg		71	64 - 120	21	30
Anthracene	0.0160	U	2.61	2.056		mg/Kg		79	66 - 120	24	30
Benzidine	0.934	U	5.23	1.520	J	mg/Kg		29	5 - 120	1	50
Benzo[a]anthracene	0.0189	U	2.61	2.096		mg/Kg		80	64 - 120	26	30
Benzo[b]fluoranthene	0.0247	U	2.61	2.130		mg/Kg		81	58 - 120	28	30
Benzo[k]fluoranthene	0.0377	U	2.61	2.134		mg/Kg		82	62 - 120	26	30
Benzo[g,h,i]perylene	0.0151	U	2.61	2.129		mg/Kg		81	58 - 120	27	30
Benzo[a]pyrene	0.0189	U	2.61	2.151		mg/Kg		82	65 - 120	30	30
Bis(2-chloroethyl)ether	0.0157	U *	2.61	1.611		mg/Kg		62	57 - 120	23	30
Di (2-ethylhexyl)phthalate	0.0537	J	2.61	2.036		mg/Kg		76	65 - 120	26	30
Chrysene	0.0255	U	2.61	2.064		mg/Kg		79	65 - 120	26	30
Dibenz(a,h)anthracene	0.0179	U	2.61	2.054		mg/Kg		79	56 - 120	30	30
Dichlorobenzidine, 3,3'-	0.0849	U	5.23	3.571		mg/Kg		68	22 - 120	3	30
Diethyl phthalate	0.0245	U	2.61	2.076		mg/Kg		79	68 - 120	24	30
Dimethyl phthalate	0.0217	U *	2.61	1.938		mg/Kg		74	66 - 120	25	30
Dibutylphthalate	0.0274	U	2.61	2.084		mg/Kg		80	66 - 120	25	30
2,4-Dinitrotoluene	0.0623	U	2.61	2.069		mg/Kg		79	68 - 120	25	30
2,6-Dinitrotoluene	0.0264	U *	2.61	1.968		mg/Kg		75	68 - 120	21	30
1,2-Diphenylhydrazine(as Azobenzene)	0.0208	U	2.64	1.940		mg/Kg		73	60 - 120	25	30
Fluoranthene	0.0340	U	2.61	2.083		mg/Kg		80	64 - 120	21	30
Fluorene	0.0170	U	2.61	1.945		mg/Kg		74	66 - 120	23	30
Hexachlorobenzene	0.0274	U	2.61	2.032		mg/Kg		78	65 - 120	24	30
Hexachlorobutadiene	0.00943	U *	2.61	1.533		mg/Kg		59	58 - 120	24	30
Hexachlorocyclopentadiene	0.105	U	5.23	2.899		mg/Kg		55	43 - 120	22	30

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 560-93106-1 MSD **Client Sample ID: Cell 35 -BG-S-3-4-210308**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530638 **Prep Batch: 529835**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachloroethane	0.0201	U *	2.61	1.424	N1	mg/Kg		54	56 - 120	23	30
Indeno[1,2,3-cd]pyrene	0.0208	U	2.61	2.069		mg/Kg		79	46 - 120	28	30
Isophorone	0.0160	U *	2.61	1.598		mg/Kg		61	56 - 120	18	30
1-Methylnaphthalene	0.0106	U *	2.61	1.684		mg/Kg		64	57 - 120	21	30
2-Methylnaphthalene	0.0179	U *	2.61	1.663		mg/Kg		64	60 - 120	21	30
Naphthalene	0.0292	U *	2.61	1.552		mg/Kg		59	59 - 120	22	30
Nitrobenzene	0.0208	U *	2.61	1.493		mg/Kg		57	55 - 120	18	30
N-Nitrosodimethylamine	0.0349	U *	2.61	1.373		mg/Kg		53	50 - 120	19	30
N-Nitrosodiphenylamine	0.0198	U	2.61	1.982		mg/Kg		76	65 - 120	25	30
Phenanthrene	0.0160	U	2.61	2.004		mg/Kg		77	67 - 120	24	30
Pyrene	0.0114	U	2.61	2.090		mg/Kg		80	66 - 120	29	30
1,2,4,5-Tetrachlorobenzene	0.0462	U *	2.61	1.697		mg/Kg		65	60 - 120	19	30
2,4-Dichlorophenol	0.00943	U *	2.61	1.837		mg/Kg		70	64 - 120	23	30
Dinitrophenols	0.314	U	5.23	2.391	N1	mg/Kg		46	52 - 120	13	30
Dinitro-o-cresol	0.311	U	5.23	3.527		mg/Kg		67	60 - 120	23	30
Pentachlorophenol	0.311	U	5.23	3.671		mg/Kg		70	50 - 120	23	30
2,4,6-Trichlorophenol	0.00943	U	2.61	2.039		mg/Kg		78	64 - 120	23	30
2,4,5-Trichlorophenol	0.00943	U	2.61	1.990		mg/Kg		76	65 - 120	21	30
Atrazine	0.0349	U	2.61	1.774		mg/Kg		68	50 - 150	12	30
bis (2-chloroisopropyl) ether	0.0217	U	2.61	1.574		mg/Kg		60	46 - 120	24	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*57*		*46 - 120*
2-Fluorobiphenyl	*63*		*46 - 120*
Terphenyl-d14	*87*		*46 - 120*
Phenol-d5 (Surr)	*64*		*46 - 120*
2-Fluorophenol	*60*		*43 - 120*
2,4,6-Tribromophenol	*77*		*35 - 120*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 240-476391/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476394 **Prep Batch: 476391**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0642	U	0.100	0.0642	mg/Kg		03/11/21 09:04	03/11/21 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*20 - 140*	*03/11/21 09:04*	*03/11/21 12:04*	*1*

Lab Sample ID: LCS 240-476391/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476394 **Prep Batch: 476391**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	0.800	0.7482		mg/Kg		94	75 - 126

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QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 240-476391/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476394 **Prep Batch: 476391**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Trifluorotoluene (Surr)	81		20 - 140

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 240-476548/15-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476697 **Prep Batch: 476548**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.6	U	50.0	34.6	mg/Kg		03/12/21 07:33	03/15/21 10:38	1
C28-C36	34.6	U	50.0	34.6	mg/Kg		03/12/21 07:33	03/15/21 10:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	82		39 - 120	03/12/21 07:33	03/15/21 10:38	1

Lab Sample ID: LCS 240-476548/16-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476697 **Prep Batch: 476548**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10 - C28]	250	195.4		mg/Kg		78	49 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	72		39 - 120

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 240-476383/16-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.910	U	5.00	0.910	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, gamma-	1.79	U	5.00	1.79	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, beta-	1.73	U	5.00	1.73	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Hexachlorocyclohexane, delta-	1.69	U	5.00	1.69	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Heptachlor	1.58	U	5.00	1.58	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Aldrin	0.770	U	5.00	0.770	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Heptachlor epoxide	1.44	U	5.00	1.44	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan I	1.20	U	5.00	1.20	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Dieldrin	1.10	U	5.00	1.10	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endrin	1.90	U	5.00	1.90	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan II	1.48	U	5.00	1.48	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
DDT	1.13	U	5.00	1.13	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endrin aldehyde	1.31	U	5.00	1.31	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Endosulfan sulfate	1.28	U	5.00	1.28	ug/Kg		03/11/21 08:26	03/15/21 18:53	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 240-476383/16-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	12.0	U	50.0	12.0	ug/Kg		03/11/21 08:26	03/15/21 18:53	1
Toxaphene	25.0	U	100	25.0	ug/Kg		03/11/21 08:26	03/15/21 18:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*30 - 120*	*03/11/21 08:26*	*03/15/21 18:53*	*1*
DCB Decachlorobiphenyl	*94*		*13 - 135*	*03/11/21 08:26*	*03/15/21 18:53*	*1*

Lab Sample ID: LCS 240-476383/17-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclohexane, alpha-	100	89.42		ug/Kg		89	48 - 120
Hexachlorocyclohexane, gamma-	100	78.54		ug/Kg		79	39 - 120
Hexachlorocyclohexane, beta-	100	93.41		ug/Kg		93	45 - 120
Hexachlorocyclohexane, delta-	100	92.21		ug/Kg		92	33 - 120
Heptachlor	100	95.75		ug/Kg		96	48 - 120
Aldrin	100	88.39		ug/Kg		88	36 - 120
Heptachlor epoxide	100	93.19		ug/Kg		93	51 - 120
Endosulfan I	100	80.39		ug/Kg		80	28 - 120
Dieldrin	100	97.12		ug/Kg		97	47 - 120
Endrin	100	99.57		ug/Kg		100	28 - 136
Endosulfan II	100	77.49		ug/Kg		77	39 - 120
DDT	100	104.2		ug/Kg		104	48 - 120
Endrin aldehyde	100	86.66		ug/Kg		87	38 - 120
Endosulfan sulfate	100	122.8	*	ug/Kg		123	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*76*		*30 - 120*
DCB Decachlorobiphenyl	*101*		*13 - 135*

Lab Sample ID: 560-93106-2 MS **Client Sample ID: Cell 39 -BG-S-3-4-210308**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclohexane, alpha-	0.906	U	102	83.35		ug/Kg		81	30 - 120
Hexachlorocyclohexane, gamma-	1.78	U	102	76.77		ug/Kg		75	27 - 120
Hexachlorocyclohexane, beta-	1.72	U	102	84.69		ug/Kg		83	20 - 120
Hexachlorocyclohexane, delta-	1.68	U	102	83.26		ug/Kg		81	20 - 120
Heptachlor	1.57	U	102	89.48		ug/Kg		87	35 - 120
Aldrin	0.767	U	102	82.38		ug/Kg		80	15 - 120
Heptachlor epoxide	1.43	U	102	85.22		ug/Kg		83	32 - 120
Endosulfan I	1.20	U	102	70.48		ug/Kg		69	10 - 120
Dieldrin	1.10	U	102	89.79		ug/Kg		88	29 - 120
Endrin	1.89	U	102	92.74		ug/Kg		91	26 - 129
Endosulfan II	1.47	U	102	67.45		ug/Kg		66	21 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 560-93106-2 MS **Client Sample ID: Cell 39 -BG-S-3-4-210308**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
DDT	1.13	U	102	95.32		ug/Kg		93	19 - 125
Endrin aldehyde	1.30	U	102	65.00		ug/Kg		63	18 - 120
Endosulfan sulfate	1.27	U *	102	111.9		ug/Kg		109	27 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*73*		*30 - 120*
DCB Decachlorobiphenyl	*81*		*13 - 135*

Lab Sample ID: 560-93106-2 MSD **Client Sample ID: Cell 39 -BG-S-3-4-210308**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 476838 **Prep Batch: 476383**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorocyclohexane, alpha-	0.906	U	101	51.22	N2	ug/Kg		51	30 - 120	48	40
Hexachlorocyclohexane, gamma-	1.78	U	101	46.31	N2	ug/Kg		46	27 - 120	49	40
Hexachlorocyclohexane, beta-	1.72	U	101	55.23	N2	ug/Kg		55	20 - 120	42	40
Hexachlorocyclohexane, delta-	1.68	U	101	53.53	N2	ug/Kg		53	20 - 120	43	40
Heptachlor	1.57	U	101	57.14	N2	ug/Kg		56	35 - 120	44	40
Aldrin	0.767	U	101	52.44	N2	ug/Kg		52	15 - 120	44	40
Heptachlor epoxide	1.43	U	101	55.46	N2	ug/Kg		55	32 - 120	42	40
Endosulfan I	1.20	U	101	45.50	N2	ug/Kg		45	10 - 120	43	40
Dieldrin	1.10	U	101	58.90	N2	ug/Kg		58	29 - 120	42	40
Endrin	1.89	U	101	60.52	N2	ug/Kg		60	26 - 129	42	40
Endosulfan II	1.47	U	101	44.23	N2	ug/Kg		44	21 - 120	42	40
DDT	1.13	U	101	61.89	N2	ug/Kg		61	19 - 125	43	40
Endrin aldehyde	1.30	U	101	48.43		ug/Kg		48	18 - 120	29	40
Endosulfan sulfate	1.27	U *	101	69.16	N2	ug/Kg		68	27 - 120	47	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*45*		*30 - 120*
DCB Decachlorobiphenyl	*54*		*13 - 135*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 560-183757/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1221	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1232	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1242	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1248	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1254	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1260	0.0100	U	0.0330	0.0100	mg/Kg		03/19/21 07:31	03/19/21 15:35	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 560-183757/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		32 - 132	03/19/21 07:31	03/19/21 15:35	1
DCB Decachlorobiphenyl	88		57 - 138	03/19/21 07:31	03/19/21 15:35	1

Lab Sample ID: LCS 560-183757/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183780 **Prep Batch: 183757**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	0.667	0.5077		mg/Kg		76	40 - 130
Aroclor 1260	0.667	0.4822		mg/Kg		72	40 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	91		32 - 132
DCB Decachlorobiphenyl	78		57 - 138

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-529222/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529390 **Prep Batch: 529222**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0227	U	0.100	0.0227	mg/Kg		03/16/21 15:34	03/18/21 05:15	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0430	U	0.200	0.0430	mg/Kg		03/16/21 15:34	03/18/21 05:15	1
2,4,6-Trinitrotoluene	0.0307	U	0.100	0.0307	mg/Kg		03/16/21 15:34	03/18/21 05:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	93		83 - 122	03/16/21 15:34	03/18/21 05:15	1

Lab Sample ID: LCS 280-529222/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 529390 **Prep Batch: 529222**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	1.00	0.9950		mg/Kg		100	80 - 120
Hexahydro-1,3,5-trinitro-1,3,5-triazine	1.00	1.011		mg/Kg		101	80 - 124
2,4,6-Trinitrotoluene	1.00	1.020		mg/Kg		102	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dinitrobenzene	95		83 - 122

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Lab Sample ID: 560-93106-1 DU — **Client Sample ID: Cell 35 -BG-S-3-4-210308**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 529390 — **Prep Batch: 529222**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U		0.0219	U	mg/Kg				NC	20
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0404	U		0.0414	U	mg/Kg				NC	20
2,4,6-Trinitrotoluene	0.0289	U		0.0296	U	mg/Kg				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
1,2-Dinitrobenzene	*95*		*83 - 122*

Lab Sample ID: 560-93106-1 TRL — **Client Sample ID: Cell 35 -BG-S-3-4-210308**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 529390 — **Prep Batch: 529222**

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U		0.0222	U	mg/Kg				NC	20
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0404	U		0.0420	U	mg/Kg				NC	20
2,4,6-Trinitrotoluene	0.0289	U		0.0300	U	mg/Kg				NC	20

Surrogate	*TRL %Recovery*	*TRL Qualifier*	*Limits*
1,2-Dinitrobenzene	*94*		*83 - 122*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Lab Sample ID: MB 280-528801/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528997 — **Prep Batch: 528801**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0824	U	0.500	0.0824	ug/Kg		03/11/21 12:20	03/12/21 19:48	1

Lab Sample ID: LCS 280-528801/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528997 — **Prep Batch: 528801**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			0.500	0.5037		ug/Kg		101	80 - 120		

Lab Sample ID: DLCK 280-528995/12 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 528995

Analyte			Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			0.0500	0.04765	J	ug/L		95	70 - 130		

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Lab Sample ID: MB 280-529188/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531134 **Prep Batch: 529188**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.230	U	0.800	0.230	ug/Kg		03/16/21 13:05	04/01/21 11:25	1
Perfluorohexanesulfonic acid (PFHxS)	0.280	U	0.800	0.280	ug/Kg		03/16/21 13:05	04/01/21 11:25	1
Perfluorooctanesulfonic acid (PFOS)	0.140	U	0.800	0.140	ug/Kg		03/16/21 13:05	04/01/21 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 11:25*	*1*
13C8 PFOS	*100*		*70 - 130*	*03/16/21 13:05*	*04/01/21 11:25*	*1*

Lab Sample ID: LCS 280-529188/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531134 **Prep Batch: 529188**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	20.0	18.68		ug/Kg		93	70 - 131
Perfluorohexanesulfonic acid (PFHxS)	18.2	16.44		ug/Kg		90	70 - 135
Perfluorooctanesulfonic acid (PFOS)	18.6	15.23		ug/Kg		82	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C8 PFOA	*99*		*57 - 153*
13C8 PFOS	*105*		*70 - 130*

Lab Sample ID: DLCK 280-530729/13 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530729

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	0.500	0.5778	J	ug/L		116	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	0.455	0.4461	J	ug/L		98	70 - 130
Perfluorooctanesulfonic acid (PFOS)	0.464	0.665	U	ug/L		98	70 - 130

Surrogate	*DLCK %Recovery*	*DLCK Qualifier*	*Limits*
13C8 PFOA	*105*		*57 - 153*
13C8 PFOS	*106*		*70 - 130*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 160-501560/1-A ^2 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502417 **Prep Batch: 501560**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0668	U	0.178	0.0668	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Arsenic	0.356	U	0.891	0.356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Barium	0.446	U	1.78	0.446	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Beryllium	0.0356	U	0.0891	0.0356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 160-501560/1-A ^2 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502417 **Prep Batch: 501560**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0214	U	0.0446	0.0214	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Chromium	0.401	U	0.891	0.401	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Iron	5.35	U	10.7	5.35	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Copper	0.356	U	0.891	0.356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Manganese	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Lead	0.111	U	0.267	0.111	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Antimony	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Selenium	0.285	U	0.446	0.285	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Thallium	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Zinc	1.78	U	4.46	1.78	mg/Kg		03/11/21 10:09	03/17/21 17:37	2
Uranium	0.0356	U	0.0891	0.0356	mg/Kg		03/11/21 10:09	03/17/21 17:37	2

Lab Sample ID: MB 160-501560/1-A ^2 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502812 **Prep Batch: 501560**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0668	U	0.178	0.0668	mg/Kg		03/11/21 10:09	03/23/21 12:38	2
Beryllium	0.0356	U	0.0891	0.0356	mg/Kg		03/11/21 10:09	03/23/21 12:38	2
Cadmium	0.0214	U	0.0446	0.0214	mg/Kg		03/11/21 10:09	03/23/21 12:38	2
Antimony	0.178	U	0.446	0.178	mg/Kg		03/11/21 10:09	03/23/21 12:38	2

Lab Sample ID: LCS 160-501560/2-A ^2 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502417 **Prep Batch: 501560**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	17.9	17.66		mg/Kg		99	66 - 133
Arsenic	89.4	91.81		mg/Kg		103	70 - 131
Barium	89.4	87.58		mg/Kg		98	74 - 125
Beryllium	8.94	8.422		mg/Kg		94	74 - 126
Cadmium	89.4	88.32		mg/Kg		99	73 - 139
Chromium	89.4	92.56		mg/Kg		104	69 - 130
Iron	894	938.2		mg/Kg		105	32 - 167
Copper	89.4	90.05		mg/Kg		101	73 - 126
Manganese	89.4	95.29		mg/Kg		107	77 - 124
Lead	89.4	89.23		mg/Kg		100	80 - 120
Antimony	44.7	42.04		mg/Kg		94	21 - 251
Selenium	44.7	44.80		mg/Kg		100	69 - 131
Thallium	17.9	17.45		mg/Kg		98	68 - 131
Zinc	89.4	90.64		mg/Kg		101	71 - 128
Uranium	89.4	89.13		mg/Kg		100	80 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 160-502981/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 503591 — **Prep Batch: 502981**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.01147	J	0.0298	0.00993	mg/Kg		03/24/21 17:26	03/24/21 20:28	1

Lab Sample ID: LCSSRM 160-502981/2-A ^20 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 503591 — **Prep Batch: 502981**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	18.4	14.29		mg/Kg		77.6	59.8 - 159.2

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 240-476390/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476440 — **Prep Batch: 476390**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.190	U	0.500	0.190	mg/Kg		03/11/21 09:04	03/11/21 10:46	1

Lab Sample ID: LCS 240-476390/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476440 — **Prep Batch: 476390**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	5.71	6.161		mg/Kg		108	65 - 128

Lab Sample ID: MRL 240-476440/10 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476440

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0100	0.01130		mg/L		113	70 - 130

Method: 9045D - pH

Lab Sample ID: LCS 560-183677/2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	5.00	5.0		SU		100	98 - 102

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-477215/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.93	U	10.0	4.93	mg/Kg			03/18/21 11:58	1
Fluoride	0.334	U	0.500	0.334	mg/Kg			03/18/21 11:58	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-477215/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3.89	U	10.0	3.89	mg/Kg			03/18/21 11:58	1

Lab Sample ID: LCS 240-477215/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	500	502.8		mg/Kg		101	90 - 110
Fluoride	25.0	26.19		mg/Kg		105	90 - 110
Sulfate	500	511.2		mg/Kg		102	90 - 110

Lab Sample ID: MB 240-477215/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.9762	J	5.00	0.867	mg/Kg			03/18/21 11:58	1
Nitrate as N	1.41	U	5.00	1.41	mg/Kg			03/18/21 11:58	1
Nitrate Nitrite as N	0.9762	J	5.00	0.276	mg/Kg			03/18/21 11:58	1

Lab Sample ID: LCS 240-477215/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	25.0	25.51		mg/Kg		102	90 - 110
Nitrate as N	25.0	26.14		mg/Kg		105	90 - 110

Method: 9065 - Phenolics, Total Recoverable

Lab Sample ID: MB 240-479639/13-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 479712 — **Prep Batch: 479639**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		04/05/21 08:45	04/05/21 13:48	1

Lab Sample ID: LCS 240-479639/14-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 479712 — **Prep Batch: 479639**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenols, Total	48.6	57.91		mg/Kg		119	59 - 120

Lab Sample ID: 560-93106-1 MS — **Client Sample ID: Cell 35 -BG-S-3-4-210308**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 479712 — **Prep Batch: 479639**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenols, Total	0.335	U	2.03	3.205	N1	mg/Kg		158	42 - 151

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: 9065 - Phenolics, Total Recoverable (Continued)

Lab Sample ID: 560-93106-1 MSD **Client Sample ID: Cell 35 -BG-S-3-4-210308**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 479712 **Prep Batch: 479639**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenols, Total	0.335	U	1.98	3.221	N1	mg/Kg		163	42 - 151	0	25

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 560-183973/1 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			03/25/21 14:10	1

Lab Sample ID: LCS 560-183973/2 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	2250	2096		mg/L		93	90 - 110

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-502083/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 504442 **Prep Batch: 502083**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02946	U	0.0720	0.0721	1.00	0.240	pCi/g	03/16/21 15:31	04/06/21 08:46	1
Radium-228	0.09023	U	0.165	0.165		0.165	pCi/g	03/16/21 15:31	04/06/21 08:46	1
Combined Radium 226 + 228	0.1197	U	0.180	0.180		0.240	pCi/g	03/16/21 15:31	04/06/21 08:46	1

Lab Sample ID: LCS 160-502083/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 504441 **Prep Batch: 502083**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Americium-241	96.4	97.72		11.5		1.24	pCi/g	101	87 - 116
Cesium-137	26.5	29.39		3.09		0.295	pCi/g	111	87 - 120
Cobalt-60	9.09	9.439		1.00		0.152	pCi/g	104	87 - 115

Lab Sample ID: 560-93106-1 DU **Client Sample ID: Cell 35 -BG-S-3-4-210308**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 504442 **Prep Batch: 502083**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.895		0.7337		0.149	1.00	0.0798	pCi/g	0.45	1
Radium-228	0.0895	U	0.08810	U	0.195		0.252	pCi/g	0	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS) (Continued)

Lab Sample ID: 560-93106-1 DU **Client Sample ID: Cell 35 -BG-S-3-4-210308**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 504442 **Prep Batch: 502083**

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Combined Radium 226 + 228	0.985			0.8218		0.245		0.252	pCi/g			0.31	1

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Laboratory: Eurofins Xenco, Corpus Christi

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Louisiana	NELAP	05094	06-30-21
Oklahoma	State	2020-006	08-31-21
Texas	NELAP	T104704210-19-23	03-31-21
USDA	US Federal Programs	P330-18-00314	10-31-21

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21 *
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21 *
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21 *
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Laboratory: Eurofins TestAmerica, Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21
A2LA	ISO/IEC 17025	2907.01	10-31-21
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-28-22
Arizona	State	AZ0713	12-21-21
Arkansas DEQ	State	19-047-0	06-01-21
California	State	2513	01-08-22
Connecticut	State	PH-0686	09-30-20 *
Florida	NELAP	E87667-57	07-01-21
Georgia	State	4025-011	01-08-22
Illinois	NELAP	2000172019-1	04-30-21
Iowa	State	IA#370	12-02-21
Kansas	NELAP	E-10166	04-30-21
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-21
Minnesota	NELAP	1788752	12-31-21
Nevada	State	CO000262020-1	07-31-21
New Hampshire	NELAP	205319	04-28-21
New Jersey	NELAP	190002	06-30-21
New York	NELAP	59923	04-01-22
North Carolina (WW/SW)	State	358	12-31-21
North Dakota	State	R-034	01-08-22
Oklahoma	State	2018-006	09-01-21
Oregon	NELAP	4025-011	01-08-22
Pennsylvania	NELAP	013	07-31-21
South Carolina	State	72002001	01-08-22
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-20-18	09-30-21
US Fish & Wildlife	US Federal Programs	058448	08-01-21
USDA	US Federal Programs	P330-18-00099	03-26-21 *
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-21
Virginia	NELAP	10490	06-14-21
Washington	State	C583-19	08-03-21
West Virginia DEP	State	354	11-30-21
Wisconsin	State	999615430	08-31-21
Wyoming (UST)	A2LA	2907.01	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-21
Florida	NELAP	E81010	06-30-21
Georgia	State	E81010(FL)	06-30-21
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026002	06-30-21
Tennessee	State	TN02907	06-30-21
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-21
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-21

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21 *
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CC
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL DEN
8270D	Pesticides by GC/MS	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL CAN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
8081A	Organochlorine Pesticides (GC)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CC
8330B	Nitroaromatics and Nitramines (HPLC)	SW846	TAL DEN
6860	Perchlorate by IC/MS or IC/MS/MS	EPA	TAL DEN
DV-LC-0012	Fluorinated Alkyl Substances	TAL-DEN	TAL DEN
6020	Metals (ICP/MS)	SW846	TAL SL
7471A	Mercury (CVAA)	SW846	TAL SL
9012B	Cyanide, Total andor Amenable	SW846	TAL CAN
9045D	pH	SW846	TAL CC
9056A	Anions, Ion Chromatography	SW846	TAL CAN
9065	Phenolics, Total Recoverable	SW846	TAL CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CC
GA-01-R	Radium-226 & Other Gamma Emitters (GS)	DOE	TAL SL
3050B	Preparation, Metals	SW846	TAL SL
335.521	TCEQ- 7-Day Distilled Water Leachate Extraction	TAC-30	TAL CC
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL CC
3546	Microwave Extraction	SW846	TAL PEN
3550C	Ultrasonic Extraction	SW846	TAL DEN
5030A	Purge and Trap	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CC
6860	Deionized Water Leach Prep	SW846	TAL DEN
7471A	Preparation, Mercury	SW846	TAL SL
8330B	Sonication Extraction (Explosives)	SW846	TAL DEN
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL CAN
DI Leach	Deionized Water Leaching Procedure	ASTM	TAL CAN
Distill/Phenol	Distillation, Phenolics	None	TAL CAN
Dry and Grind	Preparation, Dry and Grind	None	TAL SL
Fill_Geo-21	Fill Geometry, 21-Day In-Growth	None	TAL SL
Increment, prep	ISM - Dry, Disaggregate, Sieve, 2 D Slabcake Subsample	EPA	TAL DEN
PFC leach	Leaching procedure for PFAS	TAL-DEN	TAL DEN

Protocol References:

ASTM = ASTM International
DOE = U.S. Department of Energy
EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAC-30 = Chapter 30 Of The Texas Administrative Code, May 19, 1995.
TAL-DEN = TestAmerica Laboratories, Denver, Facility Standard Operating Procedure.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Method	Method Description	Protocol	Laboratory

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL CC = Eurofins Xenco, Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2471

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
560-93106-1	Cell 35 -BG-S-3-4-210308	Solid	03/08/21 12:35	03/09/21 12:18	
560-93106-2	Cell 39 -BG-S-3-4-210308	Solid	03/08/21 15:45	03/09/21 12:18	

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 560
93106

eurofins | Environment Testing America

Client Information	Sampler: J. Stenmann	Lab PM: Kudchadkar, Sachin G	Carr	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 93106
Address: 630 Plaza Drive Suite 100	Due Date Requested:			
City: Highlands Ranch	TAT Requested (days): Std			
State, Zip: CO, 80129-2377	PO #:			
Phone: 303-710-7537(Tel)	WO #:			
Email: Alison.Schaffer@arcadis.com	Project #: 56008683			
Project Name: Chevron - Jal Land Farm Soils	SSOW#:			
Site: Jal Landfarm				

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_ DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
Preservation Code:																				
~~Cell 39-BG-S-3-4-210308~~				Solid																JS 3/8
Cell 35-BG-S-3-4-210308	3/8/21	1235	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell 39-BG-S-3-4-210308	3/8/21	1545	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank	—	—	—	Solid																
				Solid																
				Solid																
				Solid																
				Solid																
				Solid																
				Solid																
				Solid																

JS 3/8/21

560-93106 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed
☐ Return To Client ☐ Disposal B

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	3/8/21 1700	Arcadis		03/09/21 1218	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: Temp = -0.5 / corrected = -0.9 IR-12

Ver: 01/16/2019

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22929.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93106-1
Address: 13715 Rider Trail North,	Due Date Requested: 4/5/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/08/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/3050B_2% (MOD) Copy Analytes	GA_01_R_Ra/Dry_Grind (MOD) Radium-226/228	7471A/7471A_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Cell 35 -BG-S-3-4-210308 (560-93106-1)	3/8/21	12:35 Central		Solid			X	X	X	2	
Cell 39 -BG-S-3-4-210308 (560-93106-2)	3/8/21	15:45 Central		Solid			X	X	X	2	

Note: Since laboratory accreditations are subject to change. Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	3/9/21 1700	EX	FED EX		
2	FED EX			Sierra Wallyn	3/10/21 0920	ETAST
3						

Custody Seals Intact: ∧ Yes ∧ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11.01.2020

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Shipping Order Form

eurofins | Environment Testing America

[redacted]

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2471 Fax (361) 289-2673

Shipping Order ID: 35428

Ship Via: FedEx Ground

Due On: 3/9/2021 11:59:00PM

Ship To Information

Project Manager:

Company Name: TestAmerica Laboratories, Inc.
Attention: Shipping/Receiving
Address 1: 13715 Rider Trail North
Address 2:
Address 3:
City: Earth City
State: MO
Zip: 63045
Phone #: 314-298-8566
Project Ref:

Notes to Bottle/Shipping Department

Shipping Method: **Standard packing**

- ☐ Ready to Fill
- ☐ Preprinted COC
  - ☐ Number of COC Copies
- ☐ Seals on Bottle
- ☐ Seals on Coolers
- ☐ Priority
- ☐ Return Shipment Labels
  - ☐ Prepaid Return
  - Eurofins Xenco, Corpus Christi
- ☐ Short Hold Times
- ☑ Temperature Control
- ☐ Rush

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.
Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.
Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

Printed on 3/9/2021 4:54:35PM

Page 2 of 3

Shipping Order ID: 35428

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Bottle Order Information

Bottle Order:
Bottle Order #:
Request From Client: 3/9/2021
Date Order Posted:
Order Status: Ready To Process
Prepared By:
Deliver By Date: ***3/9/2021 11:59:00PM***
Lab Project Number:

Order Completion Information

Creator: Amy Tuley
Filled by:
Sent Date:
Sent Via:
Tracking #:

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #

Notes to Field Staff:

Scan QR code for field sampler instructions

Health and Safety Notes:

Preservative	Comment

Relinquished By	Company	Date	Time	Received By	Company	Seal #
						Seal #
						Seal #
Relinquished By	Company	Date	Time	Received By	Company	Seal #
						Seal #
						Seal #

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.
Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

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Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22930.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93106-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 4/5/2021			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/08/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

C254

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/3546 (MOD) Copy Analytes	8015C_GRO/5035A_FW Gasoline Range Organics [C6-C10]	9056A/DI_LEACH	9056A_28D/DI_LEACH (MOD) Pick List	8081A/3540C (MOD) Priority Pollutant List	9012B/90128_Prep	9065/Distill_Phenol	Total Number of containers
			Preservation Code:											
Cell 35 -BG-S-3-4-210308 (560-93106-1)	3/8/21	12:35 Central		Solid			X	X	X	X	X	X	X	2
Cell 39 -BG-S-3-4-210308 (560-93106-2)	3/8/21	15:45 Central		Solid			X	X	X	X	X	X	X	2

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	3/9/21 1700	EX	[signature]	3-10-21 1005	EA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∧ Yes ∧ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11.01.2020

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client ETA Site Name _____ Cooler unpacked by: Mathis

Cooler Received on 3-10-21 Opened on 3-10-21

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # ETA Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-11 (CF +0.1 °C) Observed Cooler Temp. 1.1 °C Corrected Cooler Temp. 1.2 °C
   IR GUN #IR-12 (CF +0.2°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? (Yes) No
9. For each sample, does the COC specify preservatives (Y(N), # of containers (Y)N), and sample type of grab/comp(Y(N)?
10. Were correct bottle(s) used for the test(s) indicated? (Yes) No
11. Sufficient quantity received to perform indicated analyses? (Yes) No
12. Are these work share samples and all listed on the COC? (Yes) No
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC022887
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
17. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

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Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22931.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93106-1
Address: 4955 Yarrow Street,	Due Date Requested: 4/5/2021			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/08/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6860/6860_Prep Standard 6860 list	PFC/PFC_Leach (MOD) Custom List	8330B/ISM_DD_SI_SS (MOD) DOD Sublist	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Cell 35 -BG-S-3-4-210308 (560-93106-1)	3/8/21	12:35 Central		Solid			X	X	X	2	. ism subsampling is not required.
Cell 39 -BG-S-3-4-210308 (560-93106-2)	3/8/21	15:45 Central		Solid			X	X	X	2	. ism subsampling is not required.

Note: Since laboratory accreditations are subject to change. Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/9/21 1700	EX		3/10/21 1010	EDEN

Custody Seals Intact: ☑ Yes ☐ No	Custody Seal No.: 1579094	Cooler Temperature(s) °C and Other Remarks: 4.4 IR9 CF+0.2

Ver: 11 01 2020

Released to Imaging: 5/27/2022 3:16:29 PM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22932.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93106-1
Address: 3355 McLemore Drive,	Due Date Requested: 4/5/2021			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/08/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_AgChem/3546 (MOD) Copy Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Cell 35 -BG-S-3-4-210308 (560-93106-1)	3/8/21	12:35 Central		Solid			X	2	
Cell 39 -BG-S-3-4-210308 (560-93106-2)	3/8/21	15:45 Central		Solid			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				Kathy Rainey	3-10-21 940	EFA
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.8°C IR 9

Ver: 11/01/2020

Received by OCD: 5/5/2022 7:41:01 AM

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93106-1

Login Number: 93106 **List Source: Eurofins TestAmerica, Corpus Christi**
List Number: 1
Creator: Tuley, Amy E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93106-1

Login Number: 93106 **List Source: Eurofins TestAmerica, Denver**
List Number: 4 **List Creation: 03/10/21 01:13 PM**
Creator: Rystrom, Joshua R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	False	Refer to Job Narrative for details.
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93106-1

Login Number: 93106 **List Source: Eurofins TestAmerica, Pensacola**
List Number: 2 **List Creation: 03/10/21 12:11 PM**
Creator: Avery, Kathy R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8°C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93106-1

Login Number: 93106 **List Source: Eurofins TestAmerica, St. Louis**
List Number: 3 **List Creation: 03/10/21 01:34 PM**
Creator: Worthington, Sierra M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2471

Laboratory Job ID: 560-93140-1
Client Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

For:
ARCADIS U.S., Inc.
630 Plaza Drive
Suite 100
Highlands Ranch, Colorado 80129-2377

Attn: Alison Schaffer

Authorized for release by:
4/19/2021 1:26:49 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

GC VOA

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

GC Semi VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

LCMS

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Job ID: 560-93140-1

Laboratory: Eurofins Xenco, Corpus Christi

Narrative

Job Narrative
560-93140-1

Comments
No additional comments.

Receipt
The samples were received on 3/10/2021 11:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) in preparation batch 280-529681 and analytical batch 280-531704 recovered outside control limits for multiple analytes. The associated samples are outside 2x hold time; therefore the data has been reported. The following samples are affected: Cell 36-BG-S-3-4-210309 (560-93140-1), Cell 40-BG-S-3-4-210309 (560-93140-2), (LCS 280-529681/2-A), (560-93104-L-1-A), (560-93104-L-1-B MS) and (560-93104-L-1-C MSD)

Method 8270D: Surrogate recovery for the following samples in preparation batch 280-529681 and analytical batch 280-531704 was outside control limits: Cell 36-BG-S-3-4-210309 (560-93140-1), Cell 40-BG-S-3-4-210309 (560-93140-2) and (560-93104-L-1-C MSD). Evidence of matrix interferences is not obvious. The samples are outside 2x hold time; therefore the data has been reported.

Method 8270D: The surrogate recovery for the blank associated with preparation batch 280-529681 and analytical batch 280-531704 was outside the upper control limits. The associated samples are outside 2x hold time; therefore the data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

RAD
Methods 901.1, GA-01-R: Gamma Prep Batch 160-501949

Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from	Reported to Analyte
Th-234	Pa-234
Th-234	U-238
Pb-210	Po-210
Pb-210	Bi-210
Cs-137	Ba-137m
Pb-212	Po-216
Xe-131m	Xe-131
Sb-125	Te-125m
Ag-108m	Ag-108
Rh-106	Ru-106
Pb-212	Th-228
Pb-212	Ra-224
U-235	Th-231
Ac-228	Th-232

Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Job ID: 560-93140-1 (Continued)

Laboratory: Eurofins Xenco, Corpus Christi (Continued)

Ac-228	Ra-228
Th-227	Ra-223
Th-227	Ac-227
Th-227	Bi-211
Th-227	Pb-211
Bi-214	Ra-226

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

Cell 36-BG-S-3-4-210309 (560-93140-1), Cell 40-BG-S-3-4-210309 (560-93140-2), (LCS 160-501949/2-A), (MB 160-501949/1-A), (160-41440-B-12-B) and (160-41440-B-12-C DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6020: preparation batch 160-502509 and analytical batch 160-502781 The following samples were diluted due to the abundance of salts: Cell 36-BG-S-3-4-210309 (560-93140-1), Cell 40-BG-S-3-4-210309 (560-93140-2) and (560-92998-L-1-A ^20). Elevated reporting limits (RLs) are provided.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-502509 and analytical batch 160-502781 were outside control limits for barium, iron, and antimony. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.(560-92998-L-1-B MS ^20) and (560-92998-L-1-C MSD ^20)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
Method 6860: Tune on 3/26/21 was not saved correctly. Tune ran 3/27/21 and attached. preparation batch 280-528967 and analytical batch 280-530525 Cell 36-BG-S-3-4-210309 (560-93140-1), Cell 40-BG-S-3-4-210309 (560-93140-2), (560-93140-F-1-B MS) and (560-93140-F-1-C MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method 9045D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Cell 36-BG-S-3-4-210309 (560-93140-1), Cell 40-BG-S-3-4-210309 (560-93140-2) and (560-93104-A-1).

Method SM 2540C: The following samples were prepared outside of preparation holding time due to limited lab equipment to perform leach method in : Cell 36-BG-S-3-4-210309 (560-93140-1), Cell 40-BG-S-3-4-210309 (560-93140-2) and (560-93104-A-1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Methods Increment, prep: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: As requested in the method comments, the ISM subsampling portion of the ISM prep process was not performed on Cell 36-BG-S-3-4-210309 (560-93140-1), Cell 40-BG-S-3-4-210309 (560-93140-2), (560-93140-F-1 MS), (560-93140-F-1 MSD), (560-93140-F-2 DU) and (560-93140-F-2 TRL) in preparation batch 280-528992 by ISM_DD_SI_SS for 8330B_Sonc_10g/8330B.

Methods Increment, prep: The following samples in preparation batch 280-528992 by ISM_DD_SI_SS for 8330B_Sonc_10g/8330B was air dried and sieved per the procedure; however, the samples contained material that would not pass through the sieve: Cell

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Case Narrative

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Job ID: 560-93140-1 (Continued)

Laboratory: Eurofins Xenco, Corpus Christi (Continued)

36-BG-S-3-4-210309 (560-93140-1), Cell 40-BG-S-3-4-210309 (560-93140-2), (560-93140-F-1 MS), (560-93140-F-1 MSD), (560-93140-F-2 DU) and (560-93140-F-2 TRL). This material was removed and not extracted. The removed material is described in the aliquot worksheet.

Method 3550C: The following sample Cell 40-BG-S-3-4-210309 (560-93140-2) was excessively wet for method 3550C/8270D in preparation batch 280-529681 .

Method 3550C: Due to the matrix, the following sample in preparation batch 280-529681 could not be concentrated to the final method required volume: Cell 40-BG-S-3-4-210309 (560-93140-2). The reporting limits (RLs) are elevated proportionately. Method:8270D

Method 3546: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: Cell 36-BG-S-3-4-210309 (560-93140-1) and Cell 40-BG-S-3-4-210309 (560-93140-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309 Lab Sample ID: 560-93140-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10 - C28]	56.9		51.0	35.3	mg/Kg	1		8015B	Total/NA
Perchlorate	0.198	J	0.466	0.0768	ug/Kg	1		6860	Total/NA
Barium	347		18.4	4.60	mg/Kg	20		6020	Total/NA
Iron	2860		110	55.2	mg/Kg	20		6020	Total/NA
Manganese	41.5		4.60	1.84	mg/Kg	20		6020	Total/NA
Lead	2.02	J	2.76	1.15	mg/Kg	20		6020	Total/NA
Uranium	0.389	J	0.921	0.368	mg/Kg	20		6020	Total/NA
Mercury	0.0221	J b	0.0295	0.00982	mg/Kg	1		7471A	Total/NA
pH	8.2	HF	0.1	0.1	SU	1		9045D	Total/NA
Chloride	12.5		10.3	5.06	mg/Kg	1		9056A	Soluble
Fluoride	5.33		0.513	0.343	mg/Kg	1		9056A	Soluble
Nitrate as N	1.90	J	5.13	1.44	mg/Kg	1		9056A	Soluble
Nitrate Nitrite as N	1.90	J b	5.13	0.283	mg/Kg	1		9056A	Soluble
Sulfate	51.1		10.3	3.99	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	168	H	10.0	10.0	mg/L	1		SM 2540C	7 Day Leach

Client Sample ID: Cell 40-BG-S-3-4-210309 Lab Sample ID: 560-93140-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics [C6 - C10]	0.0822	J	0.0984	0.0632	mg/Kg	1		8015C	Total/NA
Diesel Range Organics [C10 - C28]	72.3		48.5	33.5	mg/Kg	1		8015B	Total/NA
Perchlorate	0.132	J	0.473	0.0779	ug/Kg	1		6860	Total/NA
Barium	299		17.7	4.43	mg/Kg	20		6020	Total/NA
Iron	1980		106	53.2	mg/Kg	20		6020	Total/NA
Manganese	19.7		4.43	1.77	mg/Kg	20		6020	Total/NA
Lead	1.36	J	2.66	1.11	mg/Kg	20		6020	Total/NA
Uranium	0.365	J	0.886	0.355	mg/Kg	20		6020	Total/NA
Mercury	0.0228	J b	0.0290	0.00967	mg/Kg	1		7471A	Total/NA
pH	8.0	HF	0.1	0.1	SU	1		9045D	Total/NA
Phenols, Total	0.358	J	0.996	0.337	mg/Kg	1		9065	Total/NA
Chloride	39.8		10.0	4.95	mg/Kg	1		9056A	Soluble
Fluoride	5.70		0.502	0.335	mg/Kg	1		9056A	Soluble
Sulfate	935		10.0	3.91	mg/Kg	1		9056A	Soluble
Total Dissolved Solids	524	H	10.0	10.0	mg/L	1		SM 2540C	7 Day Leach

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Corpus Christi

Released to Imaging: 5/27/2022 3:16:29 PM

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309 Lab Sample ID: 560-93140-1

Date Collected: 03/09/21 11:30 **Matrix: Solid**
Date Received: 03/10/21 11:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.727	U	4.98	0.727	ug/Kg			03/12/21 16:58	1
Chloromethane	1.20	U	4.98	1.20	ug/Kg			03/12/21 16:58	1
Vinyl chloride	0.598	U	4.98	0.598	ug/Kg			03/12/21 16:58	1
Bromomethane	1.10	U	4.98	1.10	ug/Kg			03/12/21 16:58	1
Trichlorofluoromethane	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
Acrolein	8.57	U	49.8	8.57	ug/Kg			03/12/21 16:58	1
1,1-Dichloroethene	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
trans-1,2-Dichloroethene	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
Methyl tert-butyl ether	0.608	U	4.98	0.608	ug/Kg			03/12/21 16:58	1
1,3-Dichlorobenzene	0.309	U	4.98	0.309	ug/Kg			03/12/21 16:58	1
Methylene Chloride	4.98	U	24.9	4.98	ug/Kg			03/12/21 16:58	1
Acrylonitrile	3.59	U	49.8	3.59	ug/Kg			03/12/21 16:58	1
cis-1,2-Dichloroethene	0.568	U	4.98	0.568	ug/Kg			03/12/21 16:58	1
Carbon tetrachloride	0.508	U	4.98	0.508	ug/Kg			03/12/21 16:58	1
Benzene	0.627	U	4.98	0.627	ug/Kg			03/12/21 16:58	1
1,2-Dichloroethane	0.518	U	4.98	0.518	ug/Kg			03/12/21 16:58	1
Trichloroethene	0.279	U	4.98	0.279	ug/Kg			03/12/21 16:58	1
1,1,1-Trichloroethane	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
1,1-Dichloroethane	0.588	U	4.98	0.588	ug/Kg			03/12/21 16:58	1
1,2-Dichloropropane	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
1,4-Dioxane	18.9	U	99.6	18.9	ug/Kg			03/12/21 16:58	1
Chloroform	0.867	U	4.98	0.867	ug/Kg			03/12/21 16:58	1
Bromodichloromethane	0.199	U	4.98	0.199	ug/Kg			03/12/21 16:58	1
1,1-Dichloropropene	0.518	U	4.98	0.518	ug/Kg			03/12/21 16:58	1
cis-1,3-Dichloropropene	0.448	U	4.98	0.448	ug/Kg			03/12/21 16:58	1
Toluene	0.896	U	4.98	0.896	ug/Kg			03/12/21 16:58	1
trans-1,3-Dichloropropene	0.518	U	4.98	0.518	ug/Kg			03/12/21 16:58	1
1,1,2-Trichloroethane	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
Tetrachloroethene	0.737	U	4.98	0.737	ug/Kg			03/12/21 16:58	1
1,3-Dichloropropene, Total	0.518	U	4.98	0.518	ug/Kg			03/12/21 16:58	1
1,2-Dibromoethane	0.299	U	4.98	0.299	ug/Kg			03/12/21 16:58	1
Monochlorobenzene	0.299	U	4.98	0.299	ug/Kg			03/12/21 16:58	1
Ethylbenzene	0.448	U	4.98	0.448	ug/Kg			03/12/21 16:58	1
Xylenes, Total	0.498	U	9.96	0.498	ug/Kg			03/12/21 16:58	1
Styrene	0.299	U	4.98	0.299	ug/Kg			03/12/21 16:58	1
Tribromomethane	0.508	U	4.98	0.508	ug/Kg			03/12/21 16:58	1
1,1,2,2-Tetrachloroethane	0.378	U	4.98	0.378	ug/Kg			03/12/21 16:58	1
1,4-Dichlorobenzene	0.319	U	4.98	0.319	ug/Kg			03/12/21 16:58	1
1,2-Dichlorobenzene	0.249	U	4.98	0.249	ug/Kg			03/12/21 16:58	1
1,2,4-Trichlorobenzene	0.966	U	4.98	0.966	ug/Kg			03/12/21 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*65 - 152*		*03/12/21 16:58*	*1*
Toluene-d8 (Surr)	*99*		*65 - 139*		*03/12/21 16:58*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.7	U	64.6	11.7	ug/Kg		03/16/21 09:20	03/19/21 17:56	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309 Lab Sample ID: 560-93140-1

Date Collected: 03/09/21 11:30 **Matrix: Solid**
Date Received: 03/10/21 11:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	98		30 - 164	03/16/21 09:20	03/19/21 17:56	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0102	U	0.328	0.0102	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Acenaphthylene	0.0816	U *	0.328	0.0816	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Anthracene	0.0169	U	0.328	0.0169	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzidine	0.983	U	3.28	0.983	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzo[a]anthracene	0.0199	U	0.328	0.0199	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzo[b]fluoranthene	0.0260	U	0.328	0.0260	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzo[k]fluoranthene	0.0397	U	0.328	0.0397	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzo[g,h,i]perylene	0.0159	U	0.328	0.0159	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzo[a]pyrene	0.0199	U	0.328	0.0199	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Bis(2-chloroethyl)ether	0.0165	U *	0.328	0.0165	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Di (2-ethylhexyl)phthalate	0.0457	U	0.328	0.0457	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Chrysene	0.0268	U	0.328	0.0268	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dibenz(a,h)anthracene	0.0189	U	0.328	0.0189	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dichlorobenzidine, 3,3'-	0.0894	U	0.656	0.0894	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Diethyl phthalate	0.0258	U *	0.656	0.0258	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dimethyl phthalate	0.0228	U	0.328	0.0228	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dibutylphthalate	0.0288	U	0.328	0.0288	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
2,4-Dinitrotoluene	0.0656	U	0.328	0.0656	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
2,6-Dinitrotoluene	0.0278	U *	0.328	0.0278	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0219	U	0.328	0.0219	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Fluoranthene	0.0358	U	0.328	0.0358	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Fluorene	0.0179	U *	0.328	0.0179	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Hexachlorobenzene	0.0288	U	0.328	0.0288	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Hexachlorobutadiene	0.00993	U	0.328	0.00993	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Hexachlorocyclopentadiene	0.110	U	1.59	0.110	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Hexachloroethane	0.0212	U *	0.328	0.0212	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Indeno[1,2,3-cd]pyrene	0.0219	U	0.328	0.0219	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Isophorone	0.0169	U	0.328	0.0169	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
1-Methylnaphthalene	0.0111	U	0.328	0.0111	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
2-Methylnaphthalene	0.0189	U *	0.328	0.0189	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Naphthalene	0.0308	U *	0.328	0.0308	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Nitrobenzene	0.0219	U	0.328	0.0219	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
N-Nitrosodi-n-butylamine	0.0961	U	0.328	0.0961	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
N-Nitrosodiethylamine	0.0646	U	0.328	0.0646	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
N-Nitrosodimethylamine	0.0368	U	0.328	0.0368	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
N-Nitrosodiphenylamine	0.0209	U	0.328	0.0209	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
N-Nitrosopyrrolidine	0.0636	U	0.328	0.0636	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Pentachlorobenzene	0.0646	U	0.328	0.0646	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Phenanthrene	0.0169	U	0.328	0.0169	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Pyrene	0.0120	U	0.328	0.0120	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
1,2,4,5-Tetrachlorobenzene	0.0487	U	0.328	0.0487	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
2,4-Dichlorophenol	0.00993	U *	0.328	0.00993	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dinitrophenols	0.331	U	1.59	0.331	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dinitro-o-cresol	0.328	U	1.59	0.328	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Pentachlorophenol	0.328	U	1.59	0.328	mg/Kg		03/19/21 11:14	04/07/21 16:04	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309 Lab Sample ID: 560-93140-1

Date Collected: 03/09/21 11:30 **Matrix: Solid**
Date Received: 03/10/21 11:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.00993	U	0.328	0.00993	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
2,4,5-Trichlorophenol	0.00993	U	0.328	0.00993	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Atrazine	0.0368	U	0.328	0.0368	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
bis (2-chloroisopropyl) ether	0.0228	U	0.328	0.0228	mg/Kg		03/19/21 11:14	04/07/21 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*34*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*
2-Fluorobiphenyl	*37*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*
Terphenyl-d14	*84*		*46 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*
Phenol-d5 (Surr)	*36*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*
2-Fluorophenol	*35*	*X*	*43 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*
2,4,6-Tribromophenol	*68*		*35 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0648	U	0.101	0.0648	mg/Kg		03/11/21 09:04	03/11/21 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*71*		*20 - 140*	*03/11/21 09:04*	*03/11/21 21:47*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	**56.9**		51.0	35.3	mg/Kg		03/12/21 07:33	03/17/21 11:18	1
C28-C36	35.3	U	51.0	35.3	mg/Kg		03/12/21 07:33	03/17/21 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*55*		*39 - 120*	*03/12/21 07:33*	*03/17/21 11:18*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.946	U	5.20	0.946	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Hexachlorocyclohexane, gamma-	1.86	U	5.20	1.86	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Hexachlorocyclohexane, beta-	1.80	U	5.20	1.80	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Hexachlorocyclohexane, delta-	1.76	U	5.20	1.76	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Heptachlor	1.64	U	5.20	1.64	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Aldrin	0.800	U	5.20	0.800	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Heptachlor epoxide	1.50	U	5.20	1.50	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Endosulfan I	1.25	U	5.20	1.25	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Dieldrin	1.14	U	5.20	1.14	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Endrin	1.98	U	5.20	1.98	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Endosulfan II	1.54	U	5.20	1.54	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
DDT	1.17	U	5.20	1.17	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Endrin aldehyde	1.36	U	5.20	1.36	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Endosulfan sulfate	1.33	U	5.20	1.33	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Chlordane (technical)	12.5	U	52.0	12.5	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Toxaphene	26.0	U	104	26.0	ug/Kg		03/12/21 08:59	03/15/21 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*30 - 120*	*03/12/21 08:59*	*03/15/21 21:54*	*1*
DCB Decachlorobiphenyl	*93*		*13 - 135*	*03/12/21 08:59*	*03/15/21 21:54*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309 Lab Sample ID: 560-93140-1

Date Collected: 03/09/21 11:30 **Matrix: Solid**
Date Received: 03/10/21 11:10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1221	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1232	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1242	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1248	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1254	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1260	0.00987	U	0.0326	0.00987	mg/Kg		03/19/21 07:31	03/19/21 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*32 - 132*	*03/19/21 07:31*	*03/19/21 21:42*	*1*
DCB Decachlorobiphenyl	*77*		*57 - 138*	*03/19/21 07:31*	*03/19/21 21:42*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0212	U	0.0933	0.0212	mg/Kg		03/16/21 15:34	03/18/21 12:55	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0401	U	0.187	0.0401	mg/Kg		03/16/21 15:34	03/18/21 12:55	1
2,4,6-Trinitrotoluene	0.0286	U	0.0933	0.0286	mg/Kg		03/16/21 15:34	03/18/21 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 12:55*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.198**	**J**	0.466	0.0768	ug/Kg		03/12/21 14:32	03/26/21 19:25	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.218	U	0.757	0.218	ug/Kg		03/16/21 13:05	04/01/21 13:37	1
Perfluorohexanesulfonic acid (PFHxS)	0.265	U	0.757	0.265	ug/Kg		03/16/21 13:05	04/01/21 13:37	1
Perfluorooctanesulfonic acid (PFOS)	0.132	U	0.757	0.132	ug/Kg		03/16/21 13:05	04/01/21 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:37*	*1*
13C8 PFOS	*102*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:37*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.691	U	1.84	0.691	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Arsenic	3.68	U	9.21	3.68	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Barium	**347**		18.4	4.60	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Beryllium	0.368	U	0.921	0.368	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Cadmium	0.221	U	0.460	0.221	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Chromium	4.14	U	9.21	4.14	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Iron	**2860**		110	55.2	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Copper	3.68	U	9.21	3.68	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Manganese	**41.5**		4.60	1.84	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Lead	**2.02**	**J**	2.76	1.15	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Antimony	1.84	U	4.60	1.84	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Selenium	2.95	U	4.60	2.95	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Thallium	1.84	U	4.60	1.84	mg/Kg		03/19/21 09:44	03/22/21 18:20	20

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309 Lab Sample ID: 560-93140-1

Date Collected: 03/09/21 11:30 **Matrix: Solid**
Date Received: 03/10/21 11:10

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	18.4	U	46.0	18.4	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Uranium	**0.389**	**J**	0.921	0.368	mg/Kg		03/19/21 09:44	03/22/21 18:20	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0221**	**J b**	0.0295	0.00982	mg/Kg		03/24/21 17:28	03/24/21 21:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.207	U	0.543	0.207	mg/Kg		03/16/21 20:43	03/16/21 23:00	1
pH	**8.2**	**HF**	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	0.334	U	0.988	0.334	mg/Kg		04/05/21 08:45	04/05/21 13:57	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.5**		10.3	5.06	mg/Kg			03/18/21 14:08	1
Nitrite as N	0.889	U	5.13	0.889	mg/Kg			03/18/21 14:08	1
Fluoride	**5.33**		0.513	0.343	mg/Kg			03/18/21 14:08	1
Nitrate as N	**1.90**	**J**	5.13	1.44	mg/Kg			03/18/21 14:08	1
Nitrate Nitrite as N	**1.90**	**J b**	5.13	0.283	mg/Kg			03/18/21 14:08	1
Sulfate	**51.1**		10.3	3.99	mg/Kg			03/18/21 14:08	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**168**	**H**	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.842**		0.155	0.178	1.00	0.0750	pCi/g	03/15/21 20:52	04/05/21 06:45	1
Radium-228	0.115	U	0.335	0.335		0.375	pCi/g	03/15/21 20:52	04/05/21 06:45	1
Combined Radium 226 + 228	**0.957**		0.369	0.379		0.375	pCi/g	03/15/21 20:52	04/05/21 06:45	1

Client Sample ID: Cell 40-BG-S-3-4-210309 Lab Sample ID: 560-93140-2

Date Collected: 03/09/21 14:40 **Matrix: Solid**
Date Received: 03/10/21 11:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.730	U	5.00	0.730	ug/Kg			03/12/21 17:23	1
Chloromethane	1.20	U	5.00	1.20	ug/Kg			03/12/21 17:23	1
Vinyl chloride	0.600	U	5.00	0.600	ug/Kg			03/12/21 17:23	1
Bromomethane	1.10	U	5.00	1.10	ug/Kg			03/12/21 17:23	1
Trichlorofluoromethane	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
Acrolein	8.60	U	50.0	8.60	ug/Kg			03/12/21 17:23	1
1,1-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
trans-1,2-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
Methyl tert-butyl ether	0.610	U	5.00	0.610	ug/Kg			03/12/21 17:23	1
1,3-Dichlorobenzene	0.310	U	5.00	0.310	ug/Kg			03/12/21 17:23	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 40-BG-S-3-4-210309 **Lab Sample ID: 560-93140-2**
Date Collected: 03/09/21 14:40 **Matrix: Solid**
Date Received: 03/10/21 11:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	5.00	U	25.0	5.00	ug/Kg			03/12/21 17:23	1
Acrylonitrile	3.60	U	50.0	3.60	ug/Kg			03/12/21 17:23	1
cis-1,2-Dichloroethene	0.570	U	5.00	0.570	ug/Kg			03/12/21 17:23	1
Carbon tetrachloride	0.510	U	5.00	0.510	ug/Kg			03/12/21 17:23	1
Benzene	0.630	U	5.00	0.630	ug/Kg			03/12/21 17:23	1
1,2-Dichloroethane	0.520	U	5.00	0.520	ug/Kg			03/12/21 17:23	1
Trichloroethene	0.280	U	5.00	0.280	ug/Kg			03/12/21 17:23	1
1,1,1-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
1,1-Dichloroethane	0.590	U	5.00	0.590	ug/Kg			03/12/21 17:23	1
1,2-Dichloropropane	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/12/21 17:23	1
Chloroform	0.870	U	5.00	0.870	ug/Kg			03/12/21 17:23	1
Bromodichloromethane	0.200	U	5.00	0.200	ug/Kg			03/12/21 17:23	1
1,1-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/12/21 17:23	1
cis-1,3-Dichloropropene	0.450	U	5.00	0.450	ug/Kg			03/12/21 17:23	1
Toluene	0.900	U	5.00	0.900	ug/Kg			03/12/21 17:23	1
trans-1,3-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/12/21 17:23	1
1,1,2-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
Tetrachloroethene	0.740	U	5.00	0.740	ug/Kg			03/12/21 17:23	1
1,3-Dichloropropene, Total	0.520	U	5.00	0.520	ug/Kg			03/12/21 17:23	1
1,2-Dibromoethane	0.300	U	5.00	0.300	ug/Kg			03/12/21 17:23	1
Monochlorobenzene	0.300	U	5.00	0.300	ug/Kg			03/12/21 17:23	1
Ethylbenzene	0.450	U	5.00	0.450	ug/Kg			03/12/21 17:23	1
Xylenes, Total	0.500	U	10.0	0.500	ug/Kg			03/12/21 17:23	1
Styrene	0.300	U	5.00	0.300	ug/Kg			03/12/21 17:23	1
Tribromomethane	0.510	U	5.00	0.510	ug/Kg			03/12/21 17:23	1
1,1,2,2-Tetrachloroethane	0.380	U	5.00	0.380	ug/Kg			03/12/21 17:23	1
1,4-Dichlorobenzene	0.320	U	5.00	0.320	ug/Kg			03/12/21 17:23	1
1,2-Dichlorobenzene	0.250	U	5.00	0.250	ug/Kg			03/12/21 17:23	1
1,2,4-Trichlorobenzene	0.970	U	5.00	0.970	ug/Kg			03/12/21 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*65 - 152*		*03/12/21 17:23*	*1*
Toluene-d8 (Surr)	*102*		*65 - 139*		*03/12/21 17:23*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.3	11.9	ug/Kg		03/16/21 09:20	03/19/21 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*132*		*30 - 164*	*03/16/21 09:20*	*03/19/21 18:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0948	U	3.04	0.0948	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Acenaphthylene	0.756	U *	3.04	0.756	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Anthracene	0.156	U	3.04	0.156	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Benzidine	9.11	U	30.4	9.11	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Benzo[a]anthracene	0.184	U	3.04	0.184	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Benzo[b]fluoranthene	0.241	U	3.04	0.241	mg/Kg		03/19/21 11:14	04/07/21 16:30	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 40-BG-S-3-4-210309 **Lab Sample ID: 560-93140-2**
Date Collected: 03/09/21 14:40 **Matrix: Solid**
Date Received: 03/10/21 11:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.368	U	3.04	0.368	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Benzo[g,h,i]perylene	0.147	U	3.04	0.147	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Benzo[a]pyrene	0.184	U	3.04	0.184	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Bis(2-chloroethyl)ether	0.153	U *	3.04	0.153	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Di (2-ethylhexyl)phthalate	0.423	U	3.04	0.423	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Chrysene	0.248	U	3.04	0.248	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dibenz(a,h)anthracene	0.175	U	3.04	0.175	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dichlorobenzidine, 3,3'-	0.828	U	6.07	0.828	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Diethyl phthalate	0.239	U *	6.07	0.239	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dimethyl phthalate	0.212	U	3.04	0.212	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dibutylphthalate	0.267	U	3.04	0.267	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2,4-Dinitrotoluene	0.607	U	3.04	0.607	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2,6-Dinitrotoluene	0.258	U *	3.04	0.258	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
1,2-Diphenylhydrazine(as Azobenzene)	0.202	U	3.04	0.202	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Fluoranthene	0.331	U	3.04	0.331	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Fluorene	0.166	U *	3.04	0.166	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Hexachlorobenzene	0.267	U	3.04	0.267	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Hexachlorobutadiene	0.0920	U	3.04	0.0920	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Hexachlorocyclopentadiene	1.02	U	14.7	1.02	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Hexachloroethane	0.196	U *	3.04	0.196	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Indeno[1,2,3-cd]pyrene	0.202	U	3.04	0.202	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Isophorone	0.156	U	3.04	0.156	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
1-Methylnaphthalene	0.103	U	3.04	0.103	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2-Methylnaphthalene	0.175	U *	3.04	0.175	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Naphthalene	0.285	U *	3.04	0.285	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Nitrobenzene	0.202	U	3.04	0.202	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
N-Nitrosodi-n-butylamine	0.890	U	3.04	0.890	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
N-Nitrosodiethylamine	0.598	U	3.04	0.598	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
N-Nitrosodimethylamine	0.340	U	3.04	0.340	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
N-Nitrosodiphenylamine	0.193	U	3.04	0.193	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
N-Nitrosopyrrolidine	0.589	U	3.04	0.589	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Pentachlorobenzene	0.598	U	3.04	0.598	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Phenanthrene	0.156	U	3.04	0.156	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Pyrene	0.111	U	3.04	0.111	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
1,2,4,5-Tetrachlorobenzene	0.451	U	3.04	0.451	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2,4-Dichlorophenol	0.0920	U *	3.04	0.0920	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dinitrophenols	3.06	U	14.7	3.06	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dinitro-o-cresol	3.04	U	14.7	3.04	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Pentachlorophenol	3.04	U	14.7	3.04	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2,4,6-Trichlorophenol	0.0920	U	3.04	0.0920	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2,4,5-Trichlorophenol	0.0920	U	3.04	0.0920	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Atrazine	0.340	U	3.04	0.340	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
bis (2-chloroisopropyl) ether	0.212	U	3.04	0.212	mg/Kg		03/19/21 11:14	04/07/21 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*7*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:30*	*1*
2-Fluorobiphenyl	*7*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:30*	*1*
Terphenyl-d14	*9*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:30*	*1*
Phenol-d5 (Surr)	*8*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:30*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 40-BG-S-3-4-210309
Lab Sample ID: 560-93140-2
Date Collected: 03/09/21 14:40
Matrix: Solid
Date Received: 03/10/21 11:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	8	X	43 - 120	03/19/21 11:14	04/07/21 16:30	1
2,4,6-Tribromophenol	7	X	35 - 120	03/19/21 11:14	04/07/21 16:30	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0822	J	0.0984	0.0632	mg/Kg		03/11/21 09:04	03/11/21 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	93		20 - 140	03/11/21 09:04	03/11/21 22:23	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	72.3		48.5	33.5	mg/Kg		03/12/21 07:33	03/17/21 11:45	1
C28-C36	33.5	U	48.5	33.5	mg/Kg		03/12/21 07:33	03/17/21 11:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	61		39 - 120	03/12/21 07:33	03/17/21 11:45	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.934	U	5.13	0.934	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Hexachlorocyclohexane, gamma-	1.84	U	5.13	1.84	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Hexachlorocyclohexane, beta-	1.78	U	5.13	1.78	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Hexachlorocyclohexane, delta-	1.74	U	5.13	1.74	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Heptachlor	1.62	U	5.13	1.62	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Aldrin	0.791	U	5.13	0.791	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Heptachlor epoxide	1.48	U	5.13	1.48	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Endosulfan I	1.23	U	5.13	1.23	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Dieldrin	1.13	U	5.13	1.13	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Endrin	1.95	U	5.13	1.95	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Endosulfan II	1.52	U	5.13	1.52	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
DDT	1.16	U	5.13	1.16	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Endrin aldehyde	1.34	U	5.13	1.34	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Endosulfan sulfate	1.31	U	5.13	1.31	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Chlordane (technical)	12.3	U	51.3	12.3	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Toxaphene	25.7	U	103	25.7	ug/Kg		03/12/21 08:59	03/16/21 17:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 120	03/12/21 08:59	03/16/21 17:34	1
DCB Decachlorobiphenyl	97		13 - 135	03/12/21 08:59	03/16/21 17:34	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1221	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1232	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1242	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1248	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1254	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1260	0.00976	U	0.0322	0.00976	mg/Kg		03/19/21 07:31	03/19/21 22:05	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 40-BG-S-3-4-210309 Lab Sample ID: 560-93140-2

Date Collected: 03/09/21 14:40 **Matrix: Solid**
Date Received: 03/10/21 11:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*69*		*32 - 132*	*03/19/21 07:31*	*03/19/21 22:05*	*1*
DCB Decachlorobiphenyl	*59*		*57 - 138*	*03/19/21 07:31*	*03/19/21 22:05*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U	0.0938	0.0213	mg/Kg		03/16/21 15:34	03/18/21 14:04	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0403	U	0.188	0.0403	mg/Kg		03/16/21 15:34	03/18/21 14:04	1
2,4,6-Trinitrotoluene	0.0288	U	0.0938	0.0288	mg/Kg		03/16/21 15:34	03/18/21 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*94*		*83 - 122*	*03/16/21 15:34*	*03/18/21 14:04*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.132**	**J**	0.473	0.0779	ug/Kg		03/12/21 14:32	03/26/21 19:41	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.214	U	0.743	0.214	ug/Kg		03/16/21 13:05	04/01/21 13:46	1
Perfluorohexanesulfonic acid (PFHxS)	0.260	U	0.743	0.260	ug/Kg		03/16/21 13:05	04/01/21 13:46	1
Perfluorooctanesulfonic acid (PFOS)	0.130	U	0.743	0.130	ug/Kg		03/16/21 13:05	04/01/21 13:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	*97*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:46*	*1*
13C8 PFOS	*98*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:46*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.665	U	1.77	0.665	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Arsenic	3.55	U	8.86	3.55	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Barium	**299**		17.7	4.43	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Beryllium	0.355	U	0.886	0.355	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Cadmium	0.213	U	0.443	0.213	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Chromium	3.99	U	8.86	3.99	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Iron	**1980**		106	53.2	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Copper	3.55	U	8.86	3.55	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Manganese	**19.7**		4.43	1.77	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Lead	**1.36**	**J**	2.66	1.11	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Antimony	1.77	U	4.43	1.77	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Selenium	2.84	U	4.43	2.84	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Thallium	1.77	U	4.43	1.77	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Zinc	17.7	U	44.3	17.7	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Uranium	**0.365**	**J**	0.886	0.355	mg/Kg		03/19/21 09:44	03/22/21 18:24	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0228**	**J b**	0.0290	0.00967	mg/Kg		03/24/21 17:28	03/24/21 21:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.198	U	0.521	0.198	mg/Kg		03/16/21 20:43	03/16/21 23:02	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 40-BG-S-3-4-210309
Lab Sample ID: 560-93140-2
Date Collected: 03/09/21 14:40
Matrix: Solid
Date Received: 03/10/21 11:10

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0	HF	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	0.358	J	0.996	0.337	mg/Kg		04/05/21 08:45	04/05/21 13:58	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.8		10.0	4.95	mg/Kg			03/18/21 14:30	1
Nitrite as N	0.870	U	5.02	0.870	mg/Kg			03/18/21 14:30	1
Fluoride	5.70		0.502	0.335	mg/Kg			03/18/21 14:30	1
Nitrate as N	1.41	U	5.02	1.41	mg/Kg			03/18/21 14:30	1
Nitrate Nitrite as N	0.277	U	5.02	0.277	mg/Kg			03/18/21 14:30	1
Sulfate	935		10.0	3.91	mg/Kg			03/18/21 14:30	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	524	H	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.722		0.137	0.156	1.00	0.0975	pCi/g	03/15/21 20:52	04/05/21 07:44	1
Radium-228	0.214		0.177	0.178		0.200	pCi/g	03/15/21 20:52	04/05/21 07:44	1
Combined Radium 226 + 228	0.936		0.224	0.237		0.200	pCi/g	03/15/21 20:52	04/05/21 07:44	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 560-183543/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183543

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.730	U	5.00	0.730	ug/Kg			03/12/21 11:52	1
Chloromethane	1.20	U	5.00	1.20	ug/Kg			03/12/21 11:52	1
Vinyl chloride	0.600	U	5.00	0.600	ug/Kg			03/12/21 11:52	1
Bromomethane	1.10	U	5.00	1.10	ug/Kg			03/12/21 11:52	1
Trichlorofluoromethane	0.500	U	5.00	0.500	ug/Kg			03/12/21 11:52	1
Acrolein	8.60	U	50.0	8.60	ug/Kg			03/12/21 11:52	1
1,1-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/12/21 11:52	1
trans-1,2-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/12/21 11:52	1
Methyl tert-butyl ether	0.610	U	5.00	0.610	ug/Kg			03/12/21 11:52	1
1,3-Dichlorobenzene	0.310	U	5.00	0.310	ug/Kg			03/12/21 11:52	1
Methylene Chloride	5.00	U	25.0	5.00	ug/Kg			03/12/21 11:52	1
Acrylonitrile	3.60	U	50.0	3.60	ug/Kg			03/12/21 11:52	1
cis-1,2-Dichloroethene	0.570	U	5.00	0.570	ug/Kg			03/12/21 11:52	1
Carbon tetrachloride	0.510	U	5.00	0.510	ug/Kg			03/12/21 11:52	1
Benzene	0.630	U	5.00	0.630	ug/Kg			03/12/21 11:52	1
1,2-Dichloroethane	0.520	U	5.00	0.520	ug/Kg			03/12/21 11:52	1
Trichloroethene	0.280	U	5.00	0.280	ug/Kg			03/12/21 11:52	1
1,1,1-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/12/21 11:52	1
1,1-Dichloroethane	0.590	U	5.00	0.590	ug/Kg			03/12/21 11:52	1
1,2-Dichloropropane	0.500	U	5.00	0.500	ug/Kg			03/12/21 11:52	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/12/21 11:52	1
Chloroform	0.870	U	5.00	0.870	ug/Kg			03/12/21 11:52	1
Bromodichloromethane	0.200	U	5.00	0.200	ug/Kg			03/12/21 11:52	1
1,1-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/12/21 11:52	1
cis-1,3-Dichloropropene	0.450	U	5.00	0.450	ug/Kg			03/12/21 11:52	1
Toluene	0.900	U	5.00	0.900	ug/Kg			03/12/21 11:52	1
trans-1,3-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/12/21 11:52	1
1,1,2-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/12/21 11:52	1
Tetrachloroethene	0.740	U	5.00	0.740	ug/Kg			03/12/21 11:52	1
1,3-Dichloropropene, Total	0.520	U	5.00	0.520	ug/Kg			03/12/21 11:52	1
1,2-Dibromoethane	0.300	U	5.00	0.300	ug/Kg			03/12/21 11:52	1
Monochlorobenzene	0.300	U	5.00	0.300	ug/Kg			03/12/21 11:52	1
Ethylbenzene	0.450	U	5.00	0.450	ug/Kg			03/12/21 11:52	1
Xylenes, Total	0.500	U	10.0	0.500	ug/Kg			03/12/21 11:52	1
Styrene	0.300	U	5.00	0.300	ug/Kg			03/12/21 11:52	1
Tribromomethane	0.510	U	5.00	0.510	ug/Kg			03/12/21 11:52	1
1,1,2,2-Tetrachloroethane	0.380	U	5.00	0.380	ug/Kg			03/12/21 11:52	1
1,4-Dichlorobenzene	0.320	U	5.00	0.320	ug/Kg			03/12/21 11:52	1
1,2-Dichlorobenzene	0.250	U	5.00	0.250	ug/Kg			03/12/21 11:52	1
1,2,4-Trichlorobenzene	0.970	U	5.00	0.970	ug/Kg			03/12/21 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*65 - 152*		*03/12/21 11:52*	*1*
Toluene-d8 (Surr)	*96*		*65 - 139*		*03/12/21 11:52*	*1*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 560-183543/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183543

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	40.0	22.81		ug/Kg		57	13 - 130
Chloromethane	40.0	37.88		ug/Kg		95	61 - 137
Vinyl chloride	40.0	32.59		ug/Kg		81	65 - 139
Bromomethane	40.0	29.63		ug/Kg		74	57 - 155
Trichlorofluoromethane	40.0	31.80		ug/Kg		80	68 - 146
Acrolein	395	385.3		ug/Kg		98	20 - 150
1,1-Dichloroethene	40.0	38.91		ug/Kg		97	70 - 130
trans-1,2-Dichloroethene	40.0	40.47		ug/Kg		101	70 - 132
Methyl tert-butyl ether	40.0	35.20		ug/Kg		88	70 - 130
1,3-Dichlorobenzene	40.0	36.40		ug/Kg		91	70 - 130
Methylene Chloride	40.0	37.23		ug/Kg		93	61 - 150
Acrylonitrile	400	400.3		ug/Kg		100	66 - 137
cis-1,2-Dichloroethene	40.0	39.30		ug/Kg		98	70 - 130
Carbon tetrachloride	40.0	32.25		ug/Kg		81	70 - 136
Benzene	40.0	39.37		ug/Kg		98	70 - 131
1,2-Dichloroethane	40.0	32.04		ug/Kg		80	70 - 130
Trichloroethene	40.0	33.56		ug/Kg		84	70 - 130
1,1,1-Trichloroethane	40.0	34.06		ug/Kg		85	70 - 132
1,1-Dichloroethane	40.0	38.89		ug/Kg		97	70 - 130
1,2-Dichloropropane	40.0	40.56		ug/Kg		101	70 - 130
1,4-Dioxane	800	614.8		ug/Kg		77	10 - 150
Chloroform	40.0	35.84		ug/Kg		90	70 - 130
Bromodichloromethane	40.0	36.16		ug/Kg		90	70 - 130
1,1-Dichloropropene	40.0	38.75		ug/Kg		97	70 - 130
cis-1,3-Dichloropropene	40.0	39.51		ug/Kg		99	70 - 130
Toluene	40.0	37.43		ug/Kg		94	70 - 130
trans-1,3-Dichloropropene	40.0	33.71		ug/Kg		84	70 - 131
1,1,2-Trichloroethane	40.0	36.80		ug/Kg		92	70 - 130
Tetrachloroethene	40.0	32.30		ug/Kg		81	70 - 130
1,3-Dichloropropene, Total	80.0	73.21		ug/Kg		92	
1,2-Dibromoethane	40.0	33.96		ug/Kg		85	70 - 130
Monochlorobenzene	40.0	35.66		ug/Kg		89	70 - 130
Ethylbenzene	40.0	39.85		ug/Kg		100	70 - 130
Xylenes, Total	80.0	76.08		ug/Kg		95	70 - 130
Styrene	40.0	35.12		ug/Kg		88	70 - 130
Tribromomethane	40.0	26.04		ug/Kg		65	59 - 137
1,1,2,2-Tetrachloroethane	40.0	40.98		ug/Kg		102	70 - 130
1,4-Dichlorobenzene	40.0	35.64		ug/Kg		89	70 - 130
1,2-Dichlorobenzene	40.0	36.21		ug/Kg		91	70 - 130
1,2,4-Trichlorobenzene	40.0	34.17		ug/Kg		85	68 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*65 - 152*
Toluene-d8 (Surr)	*102*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 560-183543/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183543

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			40.0	26.08		ug/Kg		65	13 - 130	13	30.0
Chloromethane			40.0	45.31		ug/Kg		113	61 - 137	18	30.0
Vinyl chloride			40.0	38.78		ug/Kg		97	65 - 139	17	30.0
Bromomethane			40.0	34.73		ug/Kg		87	57 - 155	16	30.0
Trichlorofluoromethane			40.0	38.38		ug/Kg		96	68 - 146	19	30.0
Acrolein			395	392.7		ug/Kg		99	20 - 150	2	30.0
1,1-Dichloroethene			40.0	46.81		ug/Kg		117	70 - 130	18	30.0
trans-1,2-Dichloroethene			40.0	47.19		ug/Kg		118	70 - 132	15	30.0
Methyl tert-butyl ether			40.0	38.78		ug/Kg		97	70 - 130	10	30.0
1,3-Dichlorobenzene			40.0	42.60		ug/Kg		107	70 - 130	16	30.0
Methylene Chloride			40.0	42.06		ug/Kg		105	61 - 150	12	30.0
Acrylonitrile			400	417.7		ug/Kg		104	66 - 137	4	30.0
cis-1,2-Dichloroethene			40.0	45.56		ug/Kg		114	70 - 130	15	30.0
Carbon tetrachloride			40.0	38.85		ug/Kg		97	70 - 136	19	30.0
Benzene			40.0	46.48		ug/Kg		116	70 - 131	17	30.0
1,2-Dichloroethane			40.0	35.61		ug/Kg		89	70 - 130	11	30.0
Trichloroethene			40.0	40.26		ug/Kg		101	70 - 130	18	30.0
1,1,1-Trichloroethane			40.0	40.82		ug/Kg		102	70 - 132	18	30.0
1,1-Dichloroethane			40.0	45.66		ug/Kg		114	70 - 130	16	30.0
1,2-Dichloropropane			40.0	47.30		ug/Kg		118	70 - 130	15	30.0
1,4-Dioxane			800	711.7		ug/Kg		89	10 - 150	15	30.0
Chloroform			40.0	41.47		ug/Kg		104	70 - 130	15	30.0
Bromodichloromethane			40.0	41.38		ug/Kg		103	70 - 130	13	30.0
1,1-Dichloropropene			40.0	47.18		ug/Kg		118	70 - 130	20	30.0
cis-1,3-Dichloropropene			40.0	46.76		ug/Kg		117	70 - 130	17	30.0
Toluene			40.0	45.10		ug/Kg		113	70 - 130	19	30.0
trans-1,3-Dichloropropene			40.0	39.30		ug/Kg		98	70 - 131	15	30.0
1,1,2-Trichloroethane			40.0	40.96		ug/Kg		102	70 - 130	11	30.0
Tetrachloroethene			40.0	42.03		ug/Kg		105	70 - 130	26	30.0
1,3-Dichloropropene, Total			80.0	86.05		ug/Kg		108		16	30
1,2-Dibromoethane			40.0	37.87		ug/Kg		95	70 - 130	11	30.0
Monochlorobenzene			40.0	41.97		ug/Kg		105	70 - 130	16	30.0
Ethylbenzene			40.0	48.82		ug/Kg		122	70 - 130	20	30.0
Xylenes, Total			80.0	91.94		ug/Kg		115	70 - 130	19	30.0
Styrene			40.0	42.52		ug/Kg		106	70 - 130	19	30.0
Tribromomethane			40.0	29.76		ug/Kg		74	59 - 137	13	30.0
1,1,2,2-Tetrachloroethane			40.0	43.35		ug/Kg		108	70 - 130	6	30.0
1,4-Dichlorobenzene			40.0	41.29		ug/Kg		103	70 - 130	15	30.0
1,2-Dichlorobenzene			40.0	41.25		ug/Kg		103	70 - 130	13	30.0
1,2,4-Trichlorobenzene			40.0	38.80		ug/Kg		97	68 - 140	13	30.0

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*65 - 152*
Toluene-d8 (Surr)	*103*		*65 - 139*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8270D - Pesticides by GC/MS

Lab Sample ID: MB 400-523876/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 524066 — **Prep Batch: 523876**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	12.0	U	66.0	12.0	ug/Kg		03/16/21 09:18	03/17/21 16:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*104*		*30 - 164*	*03/16/21 09:18*	*03/17/21 16:37*	*1*

Lab Sample ID: LCS 400-523876/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 524066 — **Prep Batch: 523876**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Prometon	333	290.2		ug/Kg		87	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Triphenylphosphate	*90*		*30 - 164*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-529681/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 531704 — **Prep Batch: 529681**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U	0.330	0.0103	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Acenaphthylene	0.0821	U	0.330	0.0821	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Anthracene	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzidine	0.990	U	3.30	0.990	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[a]anthracene	0.0200	U	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[b]fluoranthene	0.0262	U	0.330	0.0262	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[k]fluoranthene	0.0400	U	0.330	0.0400	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[g,h,i]perylene	0.0160	U	0.330	0.0160	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Benzo[a]pyrene	0.0200	U	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Bis(2-chloroethyl)ether	0.0166	U	0.330	0.0166	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Di (2-ethylhexyl)phthalate	0.0460	U	0.330	0.0460	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Chrysene	0.0270	U	0.330	0.0270	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dibenz(a,h)anthracene	0.0190	U	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dichlorobenzidine, 3,3'-	0.0900	U	0.660	0.0900	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Diethyl phthalate	0.0260	U	0.660	0.0260	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dimethyl phthalate	0.0230	U	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dibutylphthalate	0.0290	U	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4-Dinitrotoluene	0.0660	U	0.330	0.0660	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,6-Dinitrotoluene	0.0280	U	0.330	0.0280	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Fluoranthene	0.0360	U	0.330	0.0360	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Fluorene	0.0180	U	0.330	0.0180	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Hexachlorobenzene	0.0290	U	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Hexachlorobutadiene	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Hexachlorocyclopentadiene	0.111	U	1.60	0.111	mg/Kg		03/19/21 11:14	04/07/21 12:31	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-529681/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	0.0213	U	0.330	0.0213	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Indeno[1,2,3-cd]pyrene	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Isophorone	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
1-Methylnaphthalene	0.0112	U	0.330	0.0112	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2-Methylnaphthalene	0.0190	U	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Naphthalene	0.0310	U	0.330	0.0310	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Nitrobenzene	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodi-n-butylamine	0.0967	U	0.330	0.0967	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodiethylamine	0.0650	U	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodimethylamine	0.0370	U	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosodiphenylamine	0.0210	U	0.330	0.0210	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
N-Nitrosopyrrolidine	0.0640	U	0.330	0.0640	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Pentachlorobenzene	0.0650	U	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Phenanthrene	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Pyrene	0.0121	U	0.330	0.0121	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
1,2,4,5-Tetrachlorobenzene	0.0490	U	0.330	0.0490	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4-Dichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dinitrophenols	0.333	U	1.60	0.333	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Dinitro-o-cresol	0.330	U	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Pentachlorophenol	0.330	U	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4,6-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
2,4,5-Trichlorophenol	0.0100	U	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
Atrazine	0.0370	U	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 12:31	1
bis (2-chloroisopropyl) ether	0.0230	U	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*37*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
2-Fluorobiphenyl	*41*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
Terphenyl-d14	*76*		*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
Phenol-d5 (Surr)	*41*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
2-Fluorophenol	*39*	*X*	*43 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*
2,4,6-Tribromophenol	*66*		*35 - 120*	*03/19/21 11:14*	*04/07/21 12:31*	*1*

Lab Sample ID: LCS 280-529681/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	2.67	1.657		mg/Kg		62	62 - 120
Acenaphthylene	2.67	1.646	*	mg/Kg		62	64 - 120
Anthracene	2.67	1.790		mg/Kg		67	66 - 120
Benzidine	5.33	1.482	J	mg/Kg		28	5 - 120
Benzo[a]anthracene	2.67	1.822		mg/Kg		68	64 - 120
Benzo[b]fluoranthene	2.67	1.890		mg/Kg		71	58 - 120
Benzo[k]fluoranthene	2.67	1.876		mg/Kg		70	62 - 120
Benzo[g,h,i]perylene	2.67	1.836		mg/Kg		69	58 - 120
Benzo[a]pyrene	2.67	1.864		mg/Kg		70	65 - 120
Bis(2-chloroethyl)ether	2.67	1.455	*	mg/Kg		55	57 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-529681/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531704 **Prep Batch: 529681**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di (2-ethylhexyl)phthalate	2.67	1.965		mg/Kg		74	65 - 120
Chrysene	2.67	1.808		mg/Kg		68	65 - 120
Dibenz(a,h)anthracene	2.67	1.862		mg/Kg		70	56 - 120
Dichlorobenzidine, 3,3'-	5.33	3.646		mg/Kg		68	22 - 120
Diethyl phthalate	2.67	1.786	*	mg/Kg		67	68 - 120
Dimethyl phthalate	2.67	1.803		mg/Kg		68	66 - 120
Dibutylphthalate	2.67	1.909		mg/Kg		72	66 - 120
2,4-Dinitrotoluene	2.67	1.878		mg/Kg		70	68 - 120
2,6-Dinitrotoluene	2.67	1.781	*	mg/Kg		67	68 - 120
1,2-Diphenylhydrazine(as Azobenzene)	2.70	1.693		mg/Kg		63	60 - 120
Fluoranthene	2.67	1.885		mg/Kg		71	64 - 120
Fluorene	2.67	1.720	*	mg/Kg		65	66 - 120
Hexachlorobenzene	2.67	1.824		mg/Kg		68	65 - 120
Hexachlorobutadiene	2.67	1.545		mg/Kg		58	58 - 120
Hexachlorocyclopentadiene	5.33	3.407		mg/Kg		64	43 - 120
Hexachloroethane	2.67	1.415	*	mg/Kg		53	56 - 120
Indeno[1,2,3-cd]pyrene	2.67	1.876		mg/Kg		70	46 - 120
Isophorone	2.67	1.507		mg/Kg		56	56 - 120
1-Methylnaphthalene	2.67	1.586		mg/Kg		59	57 - 120
2-Methylnaphthalene	2.67	1.574	*	mg/Kg		59	60 - 120
Naphthalene	2.67	1.529	*	mg/Kg		57	59 - 120
Nitrobenzene	2.67	1.483		mg/Kg		56	55 - 120
N-Nitrosodimethylamine	2.67	1.325		mg/Kg		50	50 - 120
N-Nitrosodiphenylamine	2.67	1.764		mg/Kg		66	65 - 120
Phenanthrene	2.67	1.790		mg/Kg		67	67 - 120
Pyrene	2.67	1.832		mg/Kg		69	66 - 120
1,2,4,5-Tetrachlorobenzene	2.67	1.624		mg/Kg		61	60 - 120
2,4-Dichlorophenol	2.67	1.668	*	mg/Kg		63	64 - 120
Dinitrophenols	5.33	3.661		mg/Kg		69	52 - 120
Dinitro-o-cresol	5.33	3.773		mg/Kg		71	60 - 120
Pentachlorophenol	5.33	3.886		mg/Kg		73	50 - 120
2,4,6-Trichlorophenol	2.67	1.745		mg/Kg		65	64 - 120
2,4,5-Trichlorophenol	2.67	1.783		mg/Kg		67	65 - 120
Atrazine	2.67	1.925		mg/Kg		72	50 - 150
bis (2-chloroisopropyl) ether	2.67	1.342		mg/Kg		50	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*59*		*46 - 120*
2-Fluorobiphenyl	*61*		*46 - 120*
Terphenyl-d14	*80*		*46 - 120*
Phenol-d5 (Surr)	*62*		*46 - 120*
2-Fluorophenol	*62*		*43 - 120*
2,4,6-Tribromophenol	*75*		*35 - 120*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 240-476391/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476394 — **Prep Batch: 476391**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0642	U	0.100	0.0642	mg/Kg		03/11/21 09:04	03/11/21 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*99*		*20 - 140*	*03/11/21 09:04*	*03/11/21 12:04*	*1*

Lab Sample ID: LCS 240-476391/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476394 — **Prep Batch: 476391**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	0.800	0.7482		mg/Kg		94	75 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Trifluorotoluene (Surr)	*81*		*20 - 140*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 240-476548/15-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476697 — **Prep Batch: 476548**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.6	U	50.0	34.6	mg/Kg		03/12/21 07:33	03/15/21 10:38	1
C28-C36	34.6	U	50.0	34.6	mg/Kg		03/12/21 07:33	03/15/21 10:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*82*		*39 - 120*	*03/12/21 07:33*	*03/15/21 10:38*	*1*

Lab Sample ID: LCS 240-476548/16-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476697 — **Prep Batch: 476548**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10 - C28]	250	195.4		mg/Kg		78	49 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*72*		*39 - 120*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 240-476572/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 476838 — **Prep Batch: 476572**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.910	U	5.00	0.910	ug/Kg		03/12/21 08:59	03/15/21 22:45	1

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Job ID: 560-93140-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 240-476572/5-A
Matrix: Solid
Analysis Batch: 476838

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476572

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, gamma-	1.79	U	5.00	1.79	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Hexachlorocyclohexane, beta-	1.73	U	5.00	1.73	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Hexachlorocyclohexane, delta-	1.69	U	5.00	1.69	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Heptachlor	1.58	U	5.00	1.58	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Aldrin	0.770	U	5.00	0.770	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Heptachlor epoxide	1.44	U	5.00	1.44	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Endosulfan I	1.20	U	5.00	1.20	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Dieldrin	1.10	U	5.00	1.10	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Endrin	1.90	U	5.00	1.90	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Endosulfan II	1.48	U	5.00	1.48	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
DDT	1.13	U	5.00	1.13	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Endrin aldehyde	1.31	U	5.00	1.31	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Endosulfan sulfate	1.28	U	5.00	1.28	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Chlordane (technical)	12.0	U	50.0	12.0	ug/Kg		03/12/21 08:59	03/15/21 22:45	1
Toxaphene	25.0	U	100	25.0	ug/Kg		03/12/21 08:59	03/15/21 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*30 - 120*	*03/12/21 08:59*	*03/15/21 22:45*	*1*
DCB Decachlorobiphenyl	*86*		*13 - 135*	*03/12/21 08:59*	*03/15/21 22:45*	*1*

Lab Sample ID: LCS 240-476572/6-A
Matrix: Solid
Analysis Batch: 476838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476572

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclohexane, alpha-	100	82.55		ug/Kg		83	48 - 120
Hexachlorocyclohexane, gamma-	100	74.10		ug/Kg		74	39 - 120
Hexachlorocyclohexane, beta-	100	85.38		ug/Kg		85	45 - 120
Hexachlorocyclohexane, delta-	100	86.24		ug/Kg		86	33 - 120
Heptachlor	100	88.30		ug/Kg		88	48 - 120
Aldrin	100	81.52		ug/Kg		82	36 - 120
Heptachlor epoxide	100	86.11		ug/Kg		86	51 - 120
Endosulfan I	100	76.90		ug/Kg		77	28 - 120
Dieldrin	100	90.76		ug/Kg		91	47 - 120
Endrin	100	94.17		ug/Kg		94	28 - 136
Endosulfan II	100	74.88		ug/Kg		75	39 - 120
DDT	100	98.11		ug/Kg		98	48 - 120
Endrin aldehyde	100	79.12		ug/Kg		79	38 - 120
Endosulfan sulfate	100	102.2		ug/Kg		102	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*79*		*30 - 120*
DCB Decachlorobiphenyl	*91*		*13 - 135*

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 560-93140-2 MS **Client Sample ID: Cell 40-BG-S-3-4-210309**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 477039 **Prep Batch: 476572**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclohexane, alpha-	0.934	U	98.6	88.65		ug/Kg		90	30 - 120
Hexachlorocyclohexane, gamma-	1.84	U	98.6	80.23		ug/Kg		81	27 - 120
Hexachlorocyclohexane, beta-	1.78	U	98.6	108.8		ug/Kg		110	20 - 120
Hexachlorocyclohexane, delta-	1.74	U	98.6	90.53		ug/Kg		92	20 - 120
Heptachlor	1.62	U	98.6	96.02		ug/Kg		97	35 - 120
Aldrin	0.791	U	98.6	88.60		ug/Kg		90	15 - 120
Heptachlor epoxide	1.48	U	98.6	88.99		ug/Kg		90	32 - 120
Endosulfan I	1.23	U	98.6	81.85		ug/Kg		83	10 - 120
Dieldrin	1.13	U	98.6	97.60		ug/Kg		99	29 - 120
Endrin	1.95	U	98.6	101.3		ug/Kg		103	26 - 129
Endosulfan II	1.52	U	98.6	78.86		ug/Kg		80	21 - 120
DDT	1.16	U	98.6	107.2		ug/Kg		109	19 - 125
Endrin aldehyde	1.34	U	98.6	83.75		ug/Kg		85	18 - 120
Endosulfan sulfate	1.31	U	98.6	116.6		ug/Kg		118	27 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*30 - 120*
DCB Decachlorobiphenyl	*101*		*13 - 135*

Lab Sample ID: 560-93140-2 MSD **Client Sample ID: Cell 40-BG-S-3-4-210309**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 477039 **Prep Batch: 476572**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorocyclohexane, alpha-	0.934	U	96.3	82.94		ug/Kg		86	30 - 120	7	40
Hexachlorocyclohexane, gamma-	1.84	U	96.3	75.57		ug/Kg		78	27 - 120	6	40
Hexachlorocyclohexane, beta-	1.78	U	96.3	89.85		ug/Kg		93	20 - 120	19	40
Hexachlorocyclohexane, delta-	1.74	U	96.3	87.63		ug/Kg		91	20 - 120	3	40
Heptachlor	1.62	U	96.3	91.11		ug/Kg		95	35 - 120	5	40
Aldrin	0.791	U	96.3	84.51		ug/Kg		88	15 - 120	5	40
Heptachlor epoxide	1.48	U	96.3	88.41		ug/Kg		92	32 - 120	1	40
Endosulfan I	1.23	U	96.3	80.21		ug/Kg		83	10 - 120	2	40
Dieldrin	1.13	U	96.3	94.87		ug/Kg		98	29 - 120	3	40
Endrin	1.95	U	96.3	99.56		ug/Kg		103	26 - 129	2	40
Endosulfan II	1.52	U	96.3	77.08		ug/Kg		80	21 - 120	2	40
DDT	1.16	U	96.3	103.9		ug/Kg		108	19 - 125	3	40
Endrin aldehyde	1.34	U	96.3	77.84		ug/Kg		81	18 - 120	7	40
Endosulfan sulfate	1.31	U	96.3	111.4		ug/Kg		116	27 - 120	5	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*75*		*30 - 120*
DCB Decachlorobiphenyl	*102*		*13 - 135*

QC Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 560-183757/1-A
Matrix: Solid
Analysis Batch: 183780

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 183757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1221	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1232	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1242	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1248	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1254	0.00510	U	0.0330	0.00510	mg/Kg		03/19/21 07:31	03/19/21 15:35	1
Aroclor 1260	0.0100	U	0.0330	0.0100	mg/Kg		03/19/21 07:31	03/19/21 15:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*99*		*32 - 132*	*03/19/21 07:31*	*03/19/21 15:35*	*1*
DCB Decachlorobiphenyl	*88*		*57 - 138*	*03/19/21 07:31*	*03/19/21 15:35*	*1*

Lab Sample ID: LCS 560-183757/2-A
Matrix: Solid
Analysis Batch: 183780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 183757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor 1016	0.667	0.5077		mg/Kg		76	40 - 130
Aroclor 1260	0.667	0.4822		mg/Kg		72	40 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*91*		*32 - 132*
DCB Decachlorobiphenyl	*78*		*57 - 138*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-529227/1-A
Matrix: Solid
Analysis Batch: 529391

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 529227

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0227	U	0.100	0.0227	mg/Kg		03/16/21 15:34	03/18/21 12:09	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0430	U	0.200	0.0430	mg/Kg		03/16/21 15:34	03/18/21 12:09	1
2,4,6-Trinitrotoluene	0.0307	U	0.100	0.0307	mg/Kg		03/16/21 15:34	03/18/21 12:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 12:09*	*1*

Lab Sample ID: LCS 280-529227/2-A
Matrix: Solid
Analysis Batch: 529391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 529227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	1.00	0.9953		mg/Kg		100	80 - 120
Hexahydro-1,3,5-trinitro-1,3,5-triazine	1.00	0.9943		mg/Kg		99	80 - 124
2,4,6-Trinitrotoluene	1.00	1.014		mg/Kg		101	80 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dinitrobenzene	94		83 - 122

Lab Sample ID: 560-93140-1 MS — **Client Sample ID: Cell 36-BG-S-3-4-210309**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 529391 — **Prep Batch: 529227**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0212	U	0.989	0.9827		mg/Kg		99	80 - 120
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0401	U	0.989	0.9516		mg/Kg		96	80 - 124
2,4,6-Trinitrotoluene	0.0286	U	0.989	1.025		mg/Kg		104	80 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dinitrobenzene	97		83 - 122

Lab Sample ID: 560-93140-1 MSD — **Client Sample ID: Cell 36-BG-S-3-4-210309**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 529391 — **Prep Batch: 529227**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0212	U	0.929	0.8963		mg/Kg		96	80 - 120	9	30
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0401	U	0.929	0.8628		mg/Kg		93	80 - 124	10	30
2,4,6-Trinitrotoluene	0.0286	U	0.929	0.9325		mg/Kg		100	80 - 120	9	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dinitrobenzene	92		83 - 122

Lab Sample ID: 560-93140-2 DU — **Client Sample ID: Cell 40-BG-S-3-4-210309**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 529391 — **Prep Batch: 529227**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U	0.0217	U	mg/Kg		NC	20
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0403	U	0.0411	U	mg/Kg		NC	20
2,4,6-Trinitrotoluene	0.0288	U	0.0293	U	mg/Kg		NC	20

Surrogate	DU %Recovery	DU Qualifier	Limits
1,2-Dinitrobenzene	94		83 - 122

Lab Sample ID: 560-93140-2 TRL — **Client Sample ID: Cell 40-BG-S-3-4-210309**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 529391 — **Prep Batch: 529227**

Analyte	Sample Result	Sample Qualifier	TRL Result	TRL Qualifier	Unit	D	RSD	RSD Limit
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U	0.0213	U	mg/Kg		NC	20
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0403	U	0.0404	U	mg/Kg		NC	20

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Lab Sample ID: 560-93140-2 TRL — **Client Sample ID: Cell 40-BG-S-3-4-210309**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 529391 — **Prep Batch: 529227**

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
2,4,6-Trinitrotoluene	0.0288	U		0.0288	U	mg/Kg				NC	20

Surrogate	*TRL %Recovery*	*TRL Qualifier*	*Limits*
1,2-Dinitrobenzene	*95*		*83 - 122*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Lab Sample ID: MB 280-528967/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 530525 — **Prep Batch: 528967**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0824	U	0.500	0.0824	ug/Kg		03/12/21 14:32	03/26/21 19:10	1

Lab Sample ID: LCS 280-528967/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 530525 — **Prep Batch: 528967**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			0.500	0.4607	J	ug/Kg		92	80 - 120		

Lab Sample ID: 560-93140-1 MS — **Client Sample ID: Cell 36-BG-S-3-4-210309**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 530525 — **Prep Batch: 528967**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate	0.198	J	0.471	0.5969		ug/Kg		85	70 - 130		

Lab Sample ID: 560-93140-1 MSD — **Client Sample ID: Cell 36-BG-S-3-4-210309**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 530525 — **Prep Batch: 528967**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	0.198	J	0.473	0.5622		ug/Kg		77	70 - 130	6	15

Lab Sample ID: DLCK 280-530468/12 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 530468

Analyte			Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			0.0500	0.05439		ug/L		109	70 - 130		

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Lab Sample ID: MB 280-529188/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 531134 — **Prep Batch: 529188**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.230	U	0.800	0.230	ug/Kg		03/16/21 13:05	04/01/21 11:25	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: DV-LC-0012 - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 280-529188/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531134 **Prep Batch: 529188**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	0.280	U	0.800	0.280	ug/Kg		03/16/21 13:05	04/01/21 11:25	1
Perfluorooctanesulfonic acid (PFOS)	0.140	U	0.800	0.140	ug/Kg		03/16/21 13:05	04/01/21 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 11:25*	*1*
13C8 PFOS	*100*		*70 - 130*	*03/16/21 13:05*	*04/01/21 11:25*	*1*

Lab Sample ID: LCS 280-529188/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 531134 **Prep Batch: 529188**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	20.0	18.68		ug/Kg		93	70 - 131
Perfluorohexanesulfonic acid (PFHxS)	18.2	16.44		ug/Kg		90	70 - 135
Perfluorooctanesulfonic acid (PFOS)	18.6	15.23		ug/Kg		82	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C8 PFOA	*99*		*57 - 153*
13C8 PFOS	*105*		*70 - 130*

Lab Sample ID: DLCK 280-530729/13 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 530729

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	0.500	0.5778	J	ug/L		116	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	0.455	0.4461	J	ug/L		98	70 - 130
Perfluorooctanesulfonic acid (PFOS)	0.464	0.665	U	ug/L		98	70 - 130

Surrogate	*DLCK %Recovery*	*DLCK Qualifier*	*Limits*
13C8 PFOA	*105*		*57 - 153*
13C8 PFOS	*106*		*70 - 130*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 160-502509/1-A ^2 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502781 **Prep Batch: 502509**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0665	U	0.177	0.0665	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Arsenic	0.355	U	0.887	0.355	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Barium	0.443	U	1.77	0.443	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Beryllium	0.0355	U	0.0887	0.0355	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Cadmium	0.0213	U	0.0443	0.0213	mg/Kg		03/19/21 09:44	03/22/21 17:36	2

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 160-502509/1-A ^2 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502781 **Prep Batch: 502509**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.399	U	0.887	0.399	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Iron	5.32	U	10.6	5.32	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Copper	0.355	U	0.887	0.355	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Manganese	0.177	U	0.443	0.177	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Lead	0.111	U	0.266	0.111	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Antimony	0.177	U	0.443	0.177	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Selenium	0.284	U	0.443	0.284	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Thallium	0.177	U	0.443	0.177	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Zinc	1.77	U	4.43	1.77	mg/Kg		03/19/21 09:44	03/22/21 17:36	2
Uranium	0.0355	U	0.0887	0.0355	mg/Kg		03/19/21 09:44	03/22/21 17:36	2

Lab Sample ID: LCS 160-502509/2-A ^2 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 502781 **Prep Batch: 502509**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	17.1	15.65		mg/Kg		92	66 - 133
Arsenic	85.5	85.16		mg/Kg		100	70 - 131
Barium	85.5	78.95		mg/Kg		92	74 - 125
Beryllium	8.55	8.465		mg/Kg		99	74 - 126
Cadmium	85.5	80.12		mg/Kg		94	73 - 139
Chromium	85.5	85.48		mg/Kg		100	69 - 130
Iron	855	866.4		mg/Kg		101	32 - 167
Copper	85.5	85.02		mg/Kg		99	73 - 126
Manganese	85.5	86.58		mg/Kg		101	77 - 124
Lead	85.5	83.70		mg/Kg		98	80 - 120
Antimony	42.7	39.55		mg/Kg		93	21 - 251
Selenium	42.7	42.00		mg/Kg		98	69 - 131
Thallium	17.1	16.39		mg/Kg		96	68 - 131
Zinc	85.5	89.37		mg/Kg		105	71 - 128
Uranium	85.5	81.97		mg/Kg		96	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 160-502981/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 503591 **Prep Batch: 502981**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.01147	J	0.0298	0.00993	mg/Kg		03/24/21 17:26	03/24/21 20:28	1

Lab Sample ID: LCSSRM 160-502981/2-A ^20 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 503591 **Prep Batch: 502981**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	18.4	14.29		mg/Kg		77.6	59.8 - 159.2

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 240-477058/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 477064 **Prep Batch: 477058**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.190	U	0.500	0.190	mg/Kg		03/16/21 20:43	03/16/21 22:39	1

Lab Sample ID: LCS 240-477058/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 477064 **Prep Batch: 477058**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	5.71	6.413		mg/Kg		112	65 - 128

Method: 9045D - pH

Lab Sample ID: LCS 560-183677/2 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	5.00	5.0		SU		100	98 - 102

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-477215/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.93	U	10.0	4.93	mg/Kg			03/18/21 11:58	1
Fluoride	0.334	U	0.500	0.334	mg/Kg			03/18/21 11:58	1
Sulfate	3.89	U	10.0	3.89	mg/Kg			03/18/21 11:58	1

Lab Sample ID: LCS 240-477215/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	500	502.8		mg/Kg		101	90 - 110
Fluoride	25.0	26.19		mg/Kg		105	90 - 110
Sulfate	500	511.2		mg/Kg		102	90 - 110

Lab Sample ID: 560-93140-2 MS **Client Sample ID: Cell 40-BG-S-3-4-210309**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	39.8		502	575.7		mg/Kg		107	80 - 120
Fluoride	5.70		25.1	33.72		mg/Kg		112	80 - 120
Sulfate	935		502	1422		mg/Kg		97	80 - 120

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 560-93140-2 MSD — **Client Sample ID: Cell 40-BG-S-3-4-210309**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477216

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	39.8		502	575.3		mg/Kg		107	80 - 120	0	15
Fluoride	5.70		25.1	33.73		mg/Kg		112	80 - 120	0	15
Sulfate	935		502	1425		mg/Kg		98	80 - 120	0	15

Lab Sample ID: MB 240-477215/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.9762	J	5.00	0.867	mg/Kg			03/18/21 11:58	1
Nitrate as N	1.41	U	5.00	1.41	mg/Kg			03/18/21 11:58	1
Nitrate Nitrite as N	0.9762	J	5.00	0.276	mg/Kg			03/18/21 11:58	1

Lab Sample ID: LCS 240-477215/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	25.0	25.51		mg/Kg		102	90 - 110
Nitrate as N	25.0	26.14		mg/Kg		105	90 - 110

Lab Sample ID: 560-93140-2 MS — **Client Sample ID: Cell 40-BG-S-3-4-210309**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477217

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	0.870	U	25.1	26.90		mg/Kg		107	80 - 120
Nitrate as N	1.41	U	25.1	28.65		mg/Kg		114	80 - 120

Lab Sample ID: 560-93140-2 MSD — **Client Sample ID: Cell 40-BG-S-3-4-210309**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 477217

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrite as N	0.870	U	25.1	26.85		mg/Kg		107	80 - 120	0	15
Nitrate as N	1.41	U	25.1	28.73		mg/Kg		114	80 - 120	0	15

Method: 9065 - Phenolics, Total Recoverable

Lab Sample ID: MB 240-479639/13-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 479712 — **Prep Batch: 479639**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		04/05/21 08:45	04/05/21 13:48	1

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method: 9065 - Phenolics, Total Recoverable (Continued)

Lab Sample ID: LCS 240-479639/14-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 479712 **Prep Batch: 479639**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenols, Total	48.6	57.91		mg/Kg		119	59 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 560-183973/1 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			03/25/21 14:10	1

Lab Sample ID: LCS 560-183973/2 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 183973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	2250	2096		mg/L		93	90 - 110

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-501949/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 504247 **Prep Batch: 501949**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.1263	U	0.229	0.229	1.00	0.426	pCi/g	03/15/21 20:52	04/05/21 08:37	1
Radium-228	0.03347	U	0.108	0.108		0.361	pCi/g	03/15/21 20:52	04/05/21 08:37	1
Combined Radium 226 + 228	-0.09286	U	0.253	0.253		0.426	pCi/g	03/15/21 20:52	04/05/21 08:37	1

Lab Sample ID: LCS 160-501949/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 504243 **Prep Batch: 501949**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Americium-241	96.4	93.32		9.78		0.947	pCi/g	97	87 - 116
Cesium-137	26.5	25.12		2.67		0.186	pCi/g	95	87 - 120
Cobalt-60	9.09	8.263		0.870		0.0601	pCi/g	91	87 - 115

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Laboratory: Eurofins Xenco, Corpus Christi

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Louisiana	NELAP	05094	06-30-21
Oklahoma	State	2020-006	08-31-21
Texas	NELAP	T104704210-19-23	03-31-21
USDA	US Federal Programs	P330-18-00314	10-31-21

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21 *
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21 *
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-22
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Laboratory: Eurofins TestAmerica, Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21
A2LA	ISO/IEC 17025	2907.01	10-31-21
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-28-22
Arizona	State	AZ0713	12-21-21
Arkansas DEQ	State	19-047-0	06-01-21
California	State	2513	01-08-22
Connecticut	State	PH-0686	09-30-20 *
Florida	NELAP	E87667-57	07-01-21
Georgia	State	4025-011	01-08-22
Illinois	NELAP	2000172019-1	04-30-21
Iowa	State	IA#370	12-02-21
Kansas	NELAP	E-10166	04-30-21
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-21
Minnesota	NELAP	1788752	12-31-21
Nevada	State	CO000262020-1	07-31-21
New Hampshire	NELAP	205319	04-28-21
New Jersey	NELAP	190002	06-30-21
New York	NELAP	59923	04-01-22
North Carolina (WW/SW)	State	358	12-31-21
North Dakota	State	R-034	01-08-22
Oklahoma	State	2018-006	09-01-21
Oregon	NELAP	4025-011	01-08-22
Pennsylvania	NELAP	013	07-31-21
South Carolina	State	72002001	01-08-22
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-20-18	09-30-21
US Fish & Wildlife	US Federal Programs	058448	08-01-21
USDA	US Federal Programs	P330-18-00099	03-26-21 *
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-21
Virginia	NELAP	10490	06-14-21
Washington	State	C583-19	08-03-21
West Virginia DEP	State	354	11-30-21
Wisconsin	State	999615430	08-31-21
Wyoming (UST)	A2LA	2907.01	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-21
Florida	NELAP	E81010	06-30-21
Georgia	State	E81010(FL)	06-30-21
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
New Jersey	NELAP	FL006	06-30-21
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026002	06-30-21
Tennessee	State	TN02907	06-30-21
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-21
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-21

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-07-21
ANAB	Dept. of Energy	L2305.01	04-07-21
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21 *
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CC
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL DEN
8270D	Pesticides by GC/MS	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL CAN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL CAN
8081A	Organochlorine Pesticides (GC)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CC
8330B	Nitroaromatics and Nitramines (HPLC)	SW846	TAL DEN
6860	Perchlorate by IC/MS or IC/MS/MS	EPA	TAL DEN
DV-LC-0012	Fluorinated Alkyl Substances	TAL-DEN	TAL DEN
6020	Metals (ICP/MS)	SW846	TAL SL
7471A	Mercury (CVAA)	SW846	TAL SL
9012B	Cyanide, Total andor Amenable	SW846	TAL CAN
9045D	pH	SW846	TAL CC
9056A	Anions, Ion Chromatography	SW846	TAL CAN
9065	Phenolics, Total Recoverable	SW846	TAL CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CC
GA-01-R	Radium-226 & Other Gamma Emitters (GS)	DOE	TAL SL
3050B	Preparation, Metals	SW846	TAL SL
335.521	TCEQ- 7-Day Distilled Water Leachate Extraction	TAC-30	TAL CC
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL CC
3546	Microwave Extraction	SW846	TAL PEN
3550C	Ultrasonic Extraction	SW846	TAL DEN
5030A	Purge and Trap	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CC
6860	Deionized Water Leach Prep	SW846	TAL DEN
7471A	Preparation, Mercury	SW846	TAL SL
8330B	Sonication Extraction (Explosives)	SW846	TAL DEN
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL CAN
DI Leach	Deionized Water Leaching Procedure	ASTM	TAL CAN
Distill/Phenol	Distillation, Phenolics	None	TAL CAN
Dry and Grind	Preparation, Dry and Grind	None	TAL SL
Fill_Geo-21	Fill Geometry, 21-Day In-Growth	None	TAL SL
Increment, prep	ISM - Dry, Disaggregate, Sieve, 2 D Slabcake Subsample	EPA	TAL DEN
PFC leach	Leaching procedure for PFAS	TAL-DEN	TAL DEN

Protocol References:

ASTM = ASTM International
DOE = U.S. Department of Energy
EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAC-30 = Chapter 30 Of The Texas Administrative Code, May 19, 1995.
TAL-DEN = TestAmerica Laboratories, Denver, Facility Standard Operating Procedure.

Method Summary

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Method	Method Description	Protocol	Laboratory

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL CC = Eurofins Xenco, Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2471

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
560-93140-1	Cell 36-BG-S-3-4-210309	Solid	03/09/21 11:30	03/10/21 11:10	
560-93140-2	Cell 40-BG-S-3-4-210309	Solid	03/09/21 14:40	03/10/21 11:10	

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 93140
Address: 630 Plaza Drive Suite 100	Due Date Requested:			
City: Highlands Ranch	TAT Requested (days): Std			
State, Zip: CO, 80129-2377				
Phone: 303-710-7537(Tel)	PO #:			
Email: Alison.Schaffer@arcadis.com	WO #:			
Project Name: Chevron - Jal Land Farm Soils	Project #: 56008683			
Site: Jal landfarm	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_ DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
Preservation Code:																					
Cell 36 - BG-S-3-4-210309	3/9/21	1130	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell 40-BG-S-3-4-210309	3/9/21	1440	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank	—	—	—	Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	

Js 3/09/21

560-93140 Chain of Custody

Loc: 560
93140

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	3/9/21 1700	Arcadis	Caitlyn Forrester	03/10/2021 1110	EX
Relinquished by:					
Relinquished by:					

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

1.8 CP TB-10 2.2

Ver: 01/16/2019

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22945.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93140-1
Address: 13715 Rider Trail North.	Due Date Requested: 4/6/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/09/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/3050B_2% (MOD) Copy Analytes	GA_01_R_Ra/Dry_Grind (MOD) Radium-226/228	7471A/7471A_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Cell 36-BG-S-3-4-210309 (560-93140-1)	3/9/21	11:30 Central		Solid			X	X	X	2	
Cell 40-BG-S-3-4-210309 (560-93140-2)	3/9/21	14:40 Central		Solid			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	3/10/21 1700	EX	FED EX		
2	FED EX			[signature]	3/11/21 0905	CHASE
3						

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11.01.2020

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Shipping Order Form

eurofins | Environment Testing America

[redacted]

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2471 Fax (361) 289-2673

Shipping Order ID: 35444

Ship Via: FedEx Ground

Due On: 3/10/2021 11:59:00PM

Ship To Information

Project Manager:

Company Name: TestAmerica Laboratories, Inc.
Attention: Shipping/Receiving
Address 1: 13715 Rider Trail North
Address 2:
Address 3:
City: Earth City
State: MO
Zip: 63045
Phone #: 314-298-8566
Project Ref:

Notes to Bottle/Shipping Department

Shipping Method: **Standard packing**

- ☐ Ready to Fill
- ☐ Preprinted COC
  - ☐ Number of COC Copies
- ☐ Seals on Bottle
- ☐ Seals on Coolers
- ☐ Priority
- ☐ Return Shipment Labels
  - ☐ Prepaid Return
  - Eurofins Xenco, Corpus Christi
- ☐ Short Hold Times
- ☑ Temperature Control
- ☐ Rush

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.
Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.
Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

Printed on 3/10/2021 4:42:12PM

Page 2 of 3

Shipping Order ID: 35444

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Bottle Order Information

Bottle Order:
Bottle Order #:
Request From Client: 3/10/2021
Date Order Posted:
Order Status: Ready To Process
Prepared By:
Deliver By Date: ***3/10/2021 11:59:00PM***
Lab Project Number:

Order Completion Information

Creator: Amy Tuley
Filled by:
Sent Date:
Sent Via:
Tracking #:

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #

Notes to Field Staff:

Scan QR code for field sampler instructions

Health and Safety Notes:

Preservative	Comment

Relinquished By	Company	Date	Time	Received By	Company	Seal #
Relinquished By	Company	Date	Time	Received By	Company	Seal #

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.
Go to http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/ for field sampler instructions.

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22947.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93140-1
Address: 4101 Shuffel Street NW, .	Due Date Requested: 4/6/2021			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/09/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

C234

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO/3546 (MOD) Copy Analytes	8015C_GRO/5035A_FW Gasoline Range Organics [C6-C10]	9056A/DI_LEACH	9056A_28D/DI_LEACH (MOD) Pick List	8081A/3540C (MOD) Priority Pollutant List	9012B/9012B_Prep	9065/Distill_Phenol	Total Number of containers
			Preservation Code:											
Cell 36-BG-S-3-4-210309 (560-93140-1)	3/9/21	11:30 Central		Solid			X	X	X	X	X	X	X	2
Cell 40-BG-S-3-4-210309 (560-93140-2)	3/9/21	14:40 Central		Solid			X	X	X	X	X	X	X	2

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Clay Tuley	5/10/21 1700	EX	CAM	5-11-21 1010	ETA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11/01/2020

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA Site Name _____ Cooler unpacked by: Comm G.

Cooler Received on 3-10-21 Opened on 3-11-21

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-11 (CF +0.1 °C) Observed Cooler Temp. 2.7 °C Corrected Cooler Temp. 2.8 °C
   IR GUN #IR-12 (CF +0.2°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? (Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)? (Yes) No
10. Were correct bottle(s) used for the test(s) indicated? (Yes) No
11. Sufficient quantity received to perform indicated analyses? (Yes) No
12. Are these work share samples and all listed on the COC? (Yes) No
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC022887
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
17. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

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Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22941.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93140-1
Address: 4955 Yarrow Street,	Due Date Requested: 4/6/2021			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/09/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6860/6860_Prep Standard 6860 list	PFC/PFC_Leach (MOD) Custom List	8330B/ISM_DD_SI_SS (MOD) DOD Sublist	8270D/3550C (MOD) mod	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
Cell 36-BG-S-3-4-210309 (560-93140-1)	3/9/21	11:30 Central		Solid			X	X	X	X	2	ism subsampling is not required
Cell 40-BG-S-3-4-210309 (560-93140-2)	3/9/21	14:40 Central		Solid			X	X	X	X	2	ism subsampling is not required

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/10/21 1709	Company: EX	Received by:	Date/Time: 3/11/21 0935	Company: ENADEN
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: 1579110, 1579111 | Cooler Temperature(s) °C and Other Remarks: 3.3 IR9 (FH02

Ver: 11 01 2020

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins Xenco, Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361-289-2471 Fax: 361-289-2673

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 560-22943.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 560-93140-1
Address: 3355 McLemore Drive,	Due Date Requested: 4/6/2021			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron - Jal Land Farm Soils, 03/09/2021	Project #: 56008683			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_AgChem/3546 (MOD) Copy Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Cell 36-BG-S-3-4-210309 (560-93140-1)	3/9/21	11:30 Central		Solid			X	2	
Cell 40-BG-S-3-4-210309 (560-93140-2)	3/9/21	14:40 Central		Solid			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Amy Tuley	3/10/21 1700	EX	Kathy R Avery	3-11-21 951	GTA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.4 IR 9

Ver: 11.01.2020

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93140-1

Login Number: 93140 **List Source: Eurofins TestAmerica, Corpus Christi**
List Number: 1
Creator: Tuley, Amy E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93140-1

Login Number: 93140 **List Source: Eurofins TestAmerica, Denver**
List Number: 5 **List Creation: 03/11/21 01:29 PM**
Creator: Rystrom, Joshua R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93140-1

Login Number: 93140 **List Source: Eurofins TestAmerica, Pensacola**
List Number: 3 **List Creation: 03/11/21 02:06 PM**
Creator: Avery, Kathy R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4°C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 560-93140-1

Login Number: 93140 **List Source: Eurofins TestAmerica, St. Louis**
List Number: 2 **List Creation: 03/11/21 11:05 AM**
Creator: Worthington, Sierra M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix B

Data Validation Report

ARCADIS

CHEVRON JAL LANDFARM

DATA REVIEW

Jal Land Farm, New Mexico

Volatile Organic Compounds (VOCs), Semi Volatile Organic Compounds (SVOCs), Gasoline and Diesel Range Petroleum Hydrocarbons (TPH-GRO, DRO), Organochlorine Pesticides, Polychlorinated Biphenyls (PCBs), Nitroaromatics and Nitramines, Perchlorates, Fluorinated Alkyl Substances, Radium-226 & Other Gamma Emitters, Metals and General Chemistry Analyses

SDGs #: 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1

Analyses Performed By:
Eurofins Xenco
Corpus Christi, Texas

Report #: 41484R
Review Level: Tier II
Project: **30087690.3A GEC**

DATA REVIEW REPORT

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDGs) # 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1 for samples collected in association with the Chevron Site in Jal Landfarm, NM. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data as reported by the laboratory were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed for the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis							
						VOC	SVOC &TPH	PEST & PCB	NIT	PFAS	RAD	MET	MISC
560-92998-1	Cell 30-BG-S-3-4-210302	560-92998-1	Soil	03/02/2021		X	X	X	X	X	X	X	X
	Cell 29-BG-S-3-4-210302	560-92998-2	Soil	03/02/2021		X	X	X	X	X	X	X	X
	Cell 31-BG-S-3-4-210303	560-92998-3	Soil	03/03/2021		X	X	X	X	X	X	X	X
	Cell 32-BG-S-3-4-210303	560-92998-4	Soil	03/03/2021		X	X	X	X	X	X	X	X
560-93041-1	Cell 37 -BG-S-3-4-210304	560-93041-1	Soil	03/04/2021		X	X	X	X	X	X	X	X
	Cell 33 -BG-S-3-4-210304	560-93041-2	Soil	03/04/2021		X	X	X	X	X	X	X	X
560-93104-1	Cell 38 -BG-S-3-4-210305	560-93104-1	Soil	03/05/2021		X	X	X	X	X	X	X	X
	Cell 34 -BG-S-3-4-210305	560-93104-2	Soil	03/05/2021		X	X	X	X	X	X	X	X
560-93106-1	Cell 35 -BG-S-3-4-210308	560-93106-1	Soil	03/08/2021		X	X	X	X	X	X	X	X
	Cell 39 -BG-S-3-4-210308	560-93106-2	Soil	03/08/2021		X	X	X	X	X	X	X	X
560-93140-1	Cell 36-BG-S-3-4-210309	560-93140-1	Soil	03/09/2021		X	X	X	X	X	X	X	X
	Cell 40-BG-S-3-4-210309	560-93140-2	Soil	03/09/2021		X	X	X	X	X	X	X	X

Note:
VOC = Volatile Organic Compounds (VOCs).
SVOC & TPH = Semi Volatile Organic Compounds (SVOCs) and Total Petroleum Hydrocarbons (Gasoline and Diesel Range Petroleum Hydrocarbons (TPH-GRO, DRO)).
PEST & PCB = Organochlorine Pesticides and Polychlorinated Biphenyls (PCBs).
NIT = Nitroaromatics and Nitramines.
PFAS = Fluorinated Alkyl Substances.
RAD = Radiological
MET = Metals
MISC = Miscellaneous analysis includes Perchlorates, Cyanide Total and/or Amenable, pH, anions, and Phenolics Total Recoverable.

DATA REVIEW REPORT

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of quality assurance (QA) or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

10. Field sample ID mismatch observed between chain of custody and analysis report. Details are presented in the following table. Field sample id was considered as per chain of custody.

SDG No.	Field Sample ID on COC	Field Sample IDs on Analysis Report
560-93041-1	Cell 37 -BG-S-3-4-210304	Cell 37 -BG-S-3-4-210302
	Cell 33 -BG-S-3-4-210304	Cell 33 -BG-S-3-4-210302

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DATA REVIEW REPORT

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260B, 8270D, 8015B, 8015C, 8081A, 8082A, 8330B and proprietary laboratory method standard operating procedure (SOP) DV-LC-0012 PFAS by LCMS. Validation was performed following the procedures specified in *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (October 1999). Data were reviewed in accordance with USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-2017-002, January 2017 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, OSWER 9240.1-05A-P, October 1999, as appropriate). Department of Defense (DoD) Quality Systems Manual (QSM) 5.1 Table B-15, and/or Wisconsin PFAS Aqueous (Non-Potable Water) and Non-Aqueous Matrices Method Expectations, (EA-19-0001, December 2019).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
  - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
  - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
  - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
  - UB Compound considered non-detect at the listed value due to associated blank contamination.
  - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
  - R The sample results are rejected as unusable. The compound may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information

as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

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DATA REVIEW REPORT

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
VOCs by 8260B	Soil	14 days from extraction to analysis	Cool to <6 °C.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples were prepared and analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks, trip blanks, and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure sample storage contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: Target compounds were not detected above the MDL in the associated blanks; therefore, detected sample results are not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples exhibited surrogate recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The spiked compounds used in the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSDs performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD spiking concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: The MS/MSD analysis was not performed on samples from these SDGs.

Released to Imaging: 5/27/2022 3:16:29 PM

5. Laboratory Control Sample/ Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis are used to assess the precision and accuracy of the analytical method independent of matrix interferences. The spiked compounds used in the LCS/LCSD analysis must exhibit recoveries and RPDs within the laboratory-established acceptance limits.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All compounds associated with the LCS/LCSD analysis exhibited recoveries and RPDs within the control limits.

6. Field Duplicate Sample Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for soil matrices.

SDG# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

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DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks	X				X
C. Trip blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Field/Lab Duplicate (RPD)	X				X
Surrogate Spike Recoveries (%R)		X		X	
Dilution Factor (%D)		X		X	
Moisture Content	X				X

Notes:

%RSD =Relative standard deviation

%R = Percent recovery

RPD = Relative percent difference

%D = Percent difference

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

SDG# 560-93041-1: The analyses that exceeded the holding are presented in the following table.

Sample ID	Holding Time	Criteria
Cell 37 -BG-S-3-4-210302 Cell 33 -BG-S-3-4-210302	15 days from collection to extraction	14 days from collection to extraction

Sample results associated with sample locations analyzed by analytical method SW-846 8270 were qualified, as specified in the table below. All other holding times were met.

Criteria	Qualification	
	Detected Analytes	Non-detect Analytes
Analysis completed less than two times holding time	J	UJ
Analysis completed greater than two times holding time	J	R

SDG# 560-92998-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDG# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

SDG# 560-92998-1, 560-93041-1, 560-93104-1 and 560-93106-1: All surrogate recoveries were within control limits.

SDG# 560-93140-1: Samples associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Released to Imaging: 5/27/2022 3:16:29 PM

Sample ID	Surrogate	Recovery
Cell 36-BG-S-3-4-210309	Nitrobenzene-d5	< LL but > 10%
	2-Fluorobiphenyl	< LL but > 10%
	Phenol-d5	< LL but > 10%
	2-Fluorophenol	< LL but > 10%
Cell 40-BG-S-3-4-210309	Nitrobenzene-d5	< 10%
	2-Fluorobiphenyl	< 10%
	Terphenyl-d14	< 10%
	Phenol-d5	< 10%
	2-Fluorophenol	< 10%
	2,4,6-Tribromophenol	< 10%

Notes:

LL = Lower control limit

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Surrogates diluted below the calibration curve due to the high concentration of a target compounds	Non-detect	J[1]
	Detect	

Note:

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

SDGs# 560-92998-1, 560-93041-1 and 560-93140-1: The MS/MSD analysis was not performed on samples from these SDGs.

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

SDG# 560-93104-1: MS/MSD analysis was performed on sample ID Cell 38 -BG-S-3-4-210305. MS/MSD analysis exhibited acceptable recoveries and RPDs with the exceptions noted below.

Sample ID	Compound	MS Recovery	MSD Recovery
Cell 38 -BG-S-3-4-210305	Bis(2-chloroethyl)ether	<LL but >10%	<LL but >10%
	Hexachlorobutadiene	<LL but >10%	<LL but >10%
	Hexachloroethane	<LL but >10%	<LL but >10%
	Naphthalene	<LL but >10%	<LL but >10%
	Nitrobenzene	<LL but >10%	<LL but >10%
	N-Nitrosodimethylamine	<LL but >10%	<LL but >10%
	Dinitrophenols	<LL but >10%	<LL but >10%
	Acenaphthene	AC	<LL but >10%
	Acenaphthylene	AC	<LL but >10%
	Dimethyl phthalate	AC	<LL but >10%
	2,6-Dinitrotoluene	AC	<LL but >10%
	Fluorene	AC	<LL but >10%
	Isophorone	AC	<LL but >10%
	1-Methylnaphthalene	AC	<LL but >10%
	2-Methylnaphthalene	AC	<LL but >10%
	1,2,4,5-Tetrachlorobenzene	AC	<LL but >10%
	2,4-Dichlorophenol	AC	<LL but >10%
	Dinitro-o-cresol	AC	<LL but >10%
	2,4,6-Trichlorophenol	AC	<LL but >10%
	2,4,5-Trichlorophenol	AC	<LL but >10%
	bis (2-chloroisopropyl) ether	AC	<LL but >10%

Note:
AC Acceptable

SDG# 560-93106-1: MS/MSD analysis was performed on sample ID Cell 35 -BG-S-3-4-210308. MS/MSD analysis exhibited acceptable recoveries and RPDs with the exceptions noted below.

Sample ID	Compound	MS Recovery	MSD Recovery
Cell 35 -BG-S-3-4-210308	Acenaphthene	<LL but >10%	Acceptable
	Acenaphthylene	<LL but >10%	Acceptable
	Anthracene	<LL but >10%	Acceptable
	Benzo[a]anthracene	<LL but >10%	Acceptable
	Benzo[a]pyrene	<LL but >10%	Acceptable
	Bis(2-chloroethyl)ether	<LL but >10%	Acceptable
	Di (2-ethylhexyl)phthalate	<LL but >10%	Acceptable
	Chrysene	<LL but >10%	Acceptable
	Diethyl phthalate	<LL but >10%	Acceptable

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

Sample ID	Compound	MS Recovery	MSD Recovery
	Dimethyl phthalate	<LL but >10%	Acceptable
	Dibutylphthalate	<LL but >10%	Acceptable
	2,4-Dinitrotoluene	<LL but >10%	Acceptable
	2,6-Dinitrotoluene	<LL but >10%	Acceptable
	1,2-Diphenylhydrazine(as Azobenzene)	<LL but >10%	Acceptable
	Fluorene	<LL but >10%	Acceptable
	Hexachlorobenzene	<LL but >10%	Acceptable
	Hexachlorobutadiene	<LL but >10%	Acceptable
	Hexachloroethane	<LL but >10%	<LL but >10%
	Isophorone	<LL but >10%	Acceptable
	1-Methylnaphthalene	<LL but >10%	Acceptable
	2-Methylnaphthalene	<LL but >10%	Acceptable
	Naphthalene	<LL but >10%	Acceptable
	Nitrobenzene	<LL but >10%	Acceptable
	N-Nitrosodimethylamine	<LL but >10%	Acceptable
	N-Nitrosodiphenylamine	<LL but >10%	Acceptable
	Phenanthrene	<LL but >10%	Acceptable
	Pyrene	<LL but >10%	Acceptable
	1,2,4,5-Tetrachlorobenzene	<LL but >10%	Acceptable
	2,4-Dichlorophenol	<LL but >10%	Acceptable
	Dinitrophenols	<LL but >10%	<LL but >10%
	Dinitro-o-cresol	<LL but >10%	Acceptable
	2,4,6-Trichlorophenol	<LL but >10%	Acceptable
	2,4,5-Trichlorophenol	<LL but >10%	Acceptable

Notes:
LL = Lower control limit

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Released to Imaging: 5/27/2022 3:16:29 PM

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

SDG No.	Sample ID	Compound
560-93104-1	Cell 38 -BG-S-3-4-210305	Acenaphthene
		Acenaphthylene
		Isophorone
		1-Methylnaphthalene
		2,4-Dichlorophenol
		2,4,6-Trichlorophenol

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

5. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits with the exceptions noted below.

SDG No.	Sample ID	Compound	LCS Recovery	LCSD Recovery
560-92998-1	Cell 30-BG-S-3-4-210302 Cell 29-BG-S-3-4-210302 Cell 31-BG-S-3-4-210303 Cell 32-BG-S-3-4-210303	Bis(2-chloroethyl)ether	Acceptable	<LL but >10%
		Hexachlorobutadiene		
		Hexachloroethane		
		Isophorone		
		2-Methylnaphthalene		
		Naphthalene		
		N-Nitrosodimethylamine		
		1,2,4,5-Tetrachlorobenzene		
		2,4-Dichlorophenol		
560-93041-1	Cell 37 -BG-S-3-4-210302 Cell 33 -BG-S-3-4-210302	Acenaphthylene	<LL but >10%	Not applicable
		Bis(2-chloroethyl)ether		
		Diethyl phthalate		
		2,6-Dinitrotoluene		
		Hexachloroethane		
		2-Methylnaphthalene		
		Naphthalene		
		2,4-Dichlorophenol		

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

SDG No.	Sample ID	Compound	LCS Recovery	LCSD Recovery
560-93104-1	Cell 38 -BG-S-3-4-210305 Cell 34 -BG-S-3-4-210305	Acenaphthylene	<LL but >10%	Not applicable
		Bis(2-chloroethyl)ether		
		Diethyl phthalate		
		2,6-Dinitrotoluene		
		Fluorene		
		Hexachloroethane		
		2-Methylnaphthalene		
		Naphthalene		
		2,4-Dichlorophenol		
560-93106-1	Cell 35 -BG-S-3-4-210308 Cell 39 -BG-S-3-4-210308	Acenaphthene	<LL but >10%	Acceptable
		Acenaphthylene	<LL but >10%	<LL but >10%
		Bis(2-chloroethyl)ether	<LL but >10%	<LL but >10%
		Dimethyl phthalate	<LL but >10%	Acceptable
		2,6-Dinitrotoluene	<LL but >10%	Acceptable
		Hexachlorobutadiene	<LL but >10%	<LL but >10%
		Hexachloroethane	<LL but >10%	<LL but >10%
		Isophorone	<LL but >10%	<LL but >10%
		1-Methylnaphthalene	<LL but >10%	<LL but >10%
		2-Methylnaphthalene	<LL but >10%	<LL but >10%
		Naphthalene	<LL but >10%	<LL but >10%
		Nitrobenzene	<LL but >10%	<LL but >10%
		N-Nitrosodimethylamine	<LL but >10%	<LL but >10%
		1,2,4,5-Tetrachlorobenzene	<LL but >10%	<LL but >10%
		2,4-Dichlorophenol	<LL but >10%	<LL but >10%
560-93140-1	Cell 36-BG-S-3-4-210309 Cell 40-BG-S-3-4-210309	Acenaphthylene	<LL but >10%	Not applicable
		Bis(2-chloroethyl)ether		
		Diethyl phthalate		
		2,6-Dinitrotoluene		
		Fluorene		
		Hexachloroethane		
		2-Methylnaphthalene		
		Naphthalene		
		2,4-Dichlorophenol		

Note: LCSD analysis was not performed in the analysis batch 531704 pertaining to SDGs# 560-93104-1 and 560-93140-1.

The criteria used to evaluate the LCS/LCSD recoveries are presented in the following table. In the case of an LCS/LCSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for soil matrices.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X	X		
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks		X		X	
Laboratory Control Sample (LCS) %R		X	X		
Laboratory Control Sample Duplicate (LCSD) %R		X	X		
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X	X		
Field/Lab Duplicate (RPD)	X				X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:
%RSD = Relative standard deviation
%R = Percent recovery
RPD = Relative percent difference
%D = Percent difference

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

TOTAL PETROLEUM HYDROCARBONS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
GRO by Method 8015C	Soil	14 days from collection to analysis	Cool to <6 °C
DRO by Method 8015B	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: Target compounds were not detected above the MDL in the associated blanks; therefore, detected sample results are not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. The analysis requires surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

SDGs# 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: The MS/MSD analysis was not performed on samples from these SDGs.

SDG# 560-92998-1: MS/MSD analysis was performed on samples Cell 30-BG-S-3-4-210302 for Gasoline Range Organics and on sample Cell 32-BG-S-3-4-210303 for Diesel Range Organics. MS/MSD analysis exhibited acceptable recoveries and RPDs.

Released to Imaging: 5/27/2022 3:16:29 PM

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for soil matrices.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

GASOLINE RANGE ORGANICS (GRO) AND DIESEL RANGE ORGANICS (DRO) ANALYSES

TPH: GRO by 8015C and DRO by 8015B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/FID)					
Tier II Validation					
Holding times/Preservation		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)	X				X
Surrogate Spike Recoveries		X		X	
Dilution Factor %D		X		X	
Moisture Content	X				X

Notes:
%RSD = Relative standard deviation
%R = Percent recovery
RPD = Relative percent difference
%D = Difference

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

PESTICIDES ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8081A and 8270D	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. Pesticide analysis requires that one of the two pesticide surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All surrogate recoveries reported from the primary column were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

SDGs# 560-93041-1 and 560-93104-1: The MS/MSD analysis was not performed on samples from these SDGs.

SDG# 560-92998-1: The MS/MSD analysis was performed on sample Cell 40-BG-S-3-4-210309. MS/MSD analysis exhibited acceptable recoveries and RPDs.

SDG# 560-93140-1: The MS/MSD analysis was performed on sample Cell 30-BG-S-3-4-210302. MS/MSD analysis exhibited acceptable recoveries and RPDs.

Released to Imaging: 5/27/2022 3:16:29 PM

SDG# 560-93106-1: MS/MSD analysis was performed on sample Cell 39 -BG-S-3-4-210308. MS/MSD analysis exhibited acceptable recoveries and RPDs with the exceptions noted below.

Samples associated with MS/MSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample ID	Compound
Cell 39 -BG-S-3-4-210308	Hexachlorocyclohexane, alpha-
	Hexachlorocyclohexane, gamma-
	Hexachlorocyclohexane, beta-
	Hexachlorocyclohexane, delta-
	Heptachlor
	Aldrin
	Heptachlor epoxide
	Endosulfan I
	Dieldrin
	Dieldrin
	Endosulfan II
	DDT
	Endosulfan sulfate

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits with the exception noted below.

SDG No.	Sample ID	Compound	LCS Recovery
560-92998-1	Cell 29-BG-S-3-4-210302 Cell 31-BG-S-3-4-210303 Cell 32-BG-S-3-4-210303	Endosulfan sulfate	>UL
560-93041-1	Cell 37 -BG-S-3-4-210302 Cell 37 -BG-S-3-4-210302	Endosulfan sulfate	>UL
560-93104-1	Cell 38 -BG-S-3-4-210305 Cell 34 -BG-S-3-4-210305	Endosulfan sulfate	>UL
560-93106-1	Cell 35 -BG-S-3-4-210308 Cell 39 -BG-S-3-4-210308	Endosulfan sulfate	>UL

Released to Imaging: 5/27/2022 3:16:29 PM

qThe criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for soil matrices.

SDG# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR PESTICIDES

PESTICIDES: SW-846 8051A and 8270D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/ECD) GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks	X				X
Laboratory Control Sample (LCS)		X	X		
Laboratory Control Sample Duplicate (LCSD)	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS)		X		X	
Matrix Spike Duplicate (MSD)		X		X	
MS/MSD Precision (RPD)		X	X		
Field/Lab Duplicate (RPD)	X				X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:
%RSD = relative standard deviation
%R = percent recovery
RPD = relative percent difference
%D = difference.

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

POLYCHLORINATED BIPHENYLS (PCBs) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8082A	Soil	One year from sample collection to analysis	Cool to < 6 °C

SDG# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. PCB analysis requires that one of the two PCB surrogate compounds exhibit recoveries within the laboratory-established acceptance limits.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All surrogate recoveries reported from the primary column were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

SDG# 560-92998-1: Th MS/MSD analysis was performed on sample Cell 30-BG-S-3-4-210302. MS/MSD analysis exhibited acceptable recoveries and RPDs.

SDGs# 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: The MS/MSD analysis was not performed on samples from these SDGs.

Released to Imaging: 5/27/2022 3:16:29 PM

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for soil matrices.

SDG# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR PCBs

PCBs: SW-846 8082A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/ECD)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)	X				X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:
%RSD = Relative standard deviation
%R = Percent recovery
RPD = Relative percent difference,
%D = Difference

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

NITROAROMATICS AND NITRAMINES ANALYSIS

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8330B	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1 and 560-93140-1: Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. Explosive's analysis requires that the surrogate compound exhibit a recovery within the laboratory-established acceptance limits.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1 and 560-93140-1: All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the DoD QSM 5.0 acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established acceptance limits.

SDGs# 560-93041-1 and 560-93104-1 and 560-93106-1: MS/MSD analysis was not performed on samples from this SDG.

SDG# 560-92998-1: MS/MSD analysis was performed on sample Cell 32-BG-S-3-4-210303. MS/MSD analysis exhibited acceptable recoveries and RPDs.

SDG# 560-93140-1: MS/MSD analysis was performed on sample Cell 36-BG-S-3-4-210309. MS/MSD analysis exhibited acceptable recoveries and RPDs.

Released to Imaging: 5/27/2022 3:16:29 PM

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the reporting limit (RL), a control limit of two times the RL is applied for aqueous matrices.

SDG# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

7. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 50% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL for soil matrices.

SDG# 560-92998-1, 560-93041-1 and 560-93104-1: A laboratory duplicate analysis was not performed on samples from these SDGs.

SDG# 560-93106-1: Laboratory duplicate analysis was performed on sample ID Cell 35 -BG-S-3-4-210308. The laboratory duplicate sample results exhibited RPD within the control limit.

SDG# 560-93140-1: Laboratory duplicate analysis was performed on sample ID Cell 40-BG-S-3-4-210309. The laboratory duplicate sample results exhibited RPD within the control limit.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR EXPLOSIVES

Explosives: SW-846 8330B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC)					
Stage 2 Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field Duplicate/Laboratory Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Second Column Confirmation RPD ≤ 40%	X				X
Dilution Factor		X		X	
Moisture Content	X				X

Notes:
%RSD = Relative standard deviation
%R = Percent recovery
RPD = Relative percent difference
%D = Percent difference

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

PERFLUORINATED ALKYL ACIDS (PFAA) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
DV-LC-0012	Soil	28 days from collection to extraction and 30 days from extraction to analysis	Cool to <6 °C; Extracts must be stored at room temperature until analysis.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Internal Standard Isotopically Labelled Standards

3. 1 Extracted Internal Standard (EIS)/Isotopically Labelled Standards

Labeled standards must be added to all field samples and QC samples prior to extraction. For aqueous samples prepared by serial dilution instead of solid phase extraction, they must be added to samples prior to analysis. EIS recoveries must be within the control limits of 25% to150% with exception of compounds FOSA, NMeFOSA, NEtFOSA, NMeFOSE, and NEtFOSE, whereas a control limit of 10-150% is required.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: EIS exhibited recoveries within the control limits.

Note: Laboratory did not perform EIS for PFHxS compound since the PFHxS was not a major chemical of concern in proprietary laboratory method DV-LC-0012.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within 70-130% or within 50-150% at the low-level fortified amount (near the RL). The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within 30%.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

SDG# 560-92998-1: Th MS/MSD analysis was performed on sample Cell 30-BG-S-3-4-210302. MS/MSD analysis exhibited acceptable recoveries and RPDs.

Released to Imaging: 5/27/2022 3:16:29 PM

SDGs# 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: The MS/MSD analysis was not performed on a sample from this SDG.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within 70-130%.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: Compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for soil matrices.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR PFAs

PFAS: DV-LC-0012	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Liquid Chromatography/ Mass Spectrometry (LC/MS/MS)					
Stage 2 Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field/Equipment blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)	X				X
Extracted Internal Standard/Extracted Internal Standard (EIS)		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:
%R = Percent recovery
RPD = Relative percent difference
%D = Percent difference

DATA REVIEW REPORT

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6020, 7471A, 6860, 9056A, 9012B, 9045D, 9065 and GA-01-R by DOE method. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002. Environmental Measurements Laboratory (EML), DOE (EML is currently part of the DHS) “HASL-300 Method Ga-01-R: Gamma Radioassay” February 1997, 28th Edition.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

  B The reported value was obtained from a reading less than the contract-required detection limit (RL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

  E The reported value is estimated due to the presence of interference.

  N Spiked sample recovery is not within control limits.

  * Duplicate analysis is not within control limits.

- Validation Qualifiers

  J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA REVIEW REPORT

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6020	Soil	180 days from collection to analysis	Cool to <6 °C.
SW-846 7471A	Soil	28 days from collection to analysis	Cool to <6 °C.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the analytes listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) from the data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

SDG No.	Sample ID	Analytes	Sample Result	Qualification
560-92998-1	Cell 30-BG-S-3-4-210302	Mercury (MB)	Detected sample results <RL and <BAL	"UB" at the RL
	Cell 29-BG-S-3-4-210302			
	Cell 31-BG-S-3-4-210303			
	Cell 32-BG-S-3-4-210303			
560-93041-1	Cell 37 -BG-S-3-4-210304			
	Cell 33 -BG-S-3-4-210302			
560-93104-1	Cell 38 -BG-S-3-4-210305			
	Cell 34 -BG-S-3-4-210305			
560-93106-1	Cell 35 -BG-S-3-4-210308			
	Cell 39 -BG-S-3-4-210308			
560-93140-1	Cell 36-BG-S-3-4-210309			
	Cell 40-BG-S-3-4-210309			

Note:

RL = reporting limit

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

Released to Imaging: 5/27/2022 3:16:29 PM

3.1 MS Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

SDGs# 560-93041-1, 560-93106-1 and 560-93140-1: The MS/MSD analysis was not performed on samples from these SDGs.

SDGs# 560-93104-1: The MS/MSD analysis was performed on sample Cell 38 -BG-S-3-4-210305. MS/MSD analysis exhibited acceptable recoveries and RPDs with the exceptions noted below.

Sample ID	Analytes	MS Recovery	MSD Recovery
Cell 38 -BG-S-3-4-210305	Antimony	46%	53%

SDGs# 560-92998-1: The MS/MSD analysis was performed on sample Cell 30-BG-S-3-4-210302. MS/MSD analysis exhibited acceptable recoveries and RPDs with the exceptions noted below.

Sample ID	Analytes	MS Recovery	MSD Recovery
Cell 30-BG-S-3-4-210302	Iron	173%	229%
	Antimony	73%	73%
	Barium	Acceptable	155%

The criteria used to evaluate MS recoveries are presented in the following table. In the case of an MS deviation, the sample results are qualified. The qualifications are applied to all sample results associated with this SDG.

Control limit	Sample Result	Qualification
MS percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS percent recovery <30%	Non-detect	R
	Detect	J
MS percent recovery >125%	Non-detect	No Action
	Detect	J

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL for soil matrices.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: The laboratory duplicate analysis was not performed on samples from these SDGs.

7. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for soil matrices.

Released to Imaging: 5/27/2022 3:16:29 PM

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

SDGs# 560-93041-1, 560-93104-1, 560-93106-1: The LCS analysis exhibited recoveries within the control limits with the exceptions noted below.

SDG No.	Sample ID	Analytes	LCS Recovery
560-92998-1	Cell 30-BG-S-3-4-210302 Cell 29-BG-S-3-4-210302 Cell 31-BG-S-3-4-210303 Cell 32-BG-S-3-4-210303	Mercury	77.6%
560-93041-1	Cell 37 -BG-S-3-4-210304 Cell 33 -BG-S-3-4-210304		
560-93104-1	Cell 38 -BG-S-3-4-210305 Cell 34 -BG-S-3-4-210305		
560-93106-1	Cell 35 -BG-S-3-4-210308 Cell 39 -BG-S-3-4-210308		
560-93140-1	Cell 36-BG-S-3-4-210309 Cell 40-BG-S-3-4-210309		

The criteria used to evaluate LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified.

Control limit	Sample Result	Qualification
LCS percent recovery 50% to 79%	Non-detect	UJ
	Detect	J
LCS percent recovery <50%	Non-detect	R
	Detect	J
LCS percent recovery >120%	Non-detect	No Action
	Detect	J

9. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: Serial dilution analysis was not performed on samples from these SDGs.

10. General Assessment – Total vs. Dissolved

When the dissolved concentration exceeded the associated total concentration, and both results were five times greater than the RL, then the %D between the total and dissolved concentrations must be less than 10%.

Released to Imaging: 5/27/2022 3:16:29 PM

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: Dissolved metal analysis was not performed on samples from these SDGs.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR METAL

METALS; SW-846 6020/7471A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X		X	
B. Method Blanks		X		X	
C. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS)		X	X		
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)	X				X
ICP Serial Dilution %D	X				X
Total vs. Dissolved	X				X
Reporting Limit Verification		X		X	

Notes:
%R = Percent recovery
RPD = Relative percent difference

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

PERCHLORATE ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6860	Soil	28 days from collection to analysis	Cool to 4^0 C

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: Analytes were not detected at concentrations greater than the MDL in the associated blanks; therefore, detected sample results are not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

SDGs# 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: The MS/MSD analysis was not performed on a sample from these SDGs.

SDG# 560-92998-1: MS/MSD analysis was performed on sample Cell 30-BG-S-3-4-210302. MS/MSD analysis exhibited acceptable recoveries and RPDs.

SDG# 560-93140-1: MS/MSD analysis was performed on sample Cell 36-BG-S-3-4-210309. MS/MSD analysis exhibited acceptable recoveries and RPDs.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for soil matrices.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A laboratory duplicate analysis was not performed on a sample from this SDG.

Released to Imaging: 5/27/2022 3:16:29 PM

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for soil matrices.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

5. Laboratory Control Sample Analysis (LCS)

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR PERCHLORATE

Perchlorate: SW-846 6860	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Ion Chromatography-Mass spectroscopy (ICP-MS)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks	X				X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)	X				X
Dilution Factor		X		X	

Notes:
%R = Percent recovery
RPD = Relative percent difference
%D = Percent difference

Released to Imaging: 5/27/2022 3:16:29 PM

DATA REVIEW REPORT

RADIOLOGICAL ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
USEPA 901.1	Soil	None specified	None specified

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

QA blanks (i.e. laboratory analytical method blanks and equipment rinse blanks) are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

Blank results are verified to be accurately reported, and to confirm that tolerance limits (+/- 2 standard deviations/sigma) were not exceeded and are less than the RLs specified in the QAPP (ARCADIS 2018). Sample results less than five times the associated blank concentration are qualified as not detected (UB).

For blanks to be considered not applicable, verify that net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria:

1. The blank result is less than the uncertainty and the minimum detectable concentration (MDC).
2. The blank result has an uncertainty greater than the result (or indistinguishable from background), or the blank result falls between the uncertainty and the MDC.
3. The blank result is greater than the uncertainty and the MDC but is less than 1.65 times the uncertainty. Contamination is suspected when the net blank result is greater than the 1.65 times the uncertainty.

If any of these criteria is true, the blank is considered non-detect. If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used to determine the effect of possible blank contamination on the sample results.

$$Normalized\ absolute\ difference_{MethodBlank} = \frac{|\ Sample - Blank\ |}{\sqrt{(U_{Sample})^2 + (U_{Blank})^2}}$$

Where:

U_{Sample} = uncertainty of the sample
U_{Blank} = uncertainty of the blank
Sample = concentration of isotope in sample
Blank = concentration of isotope in blank

Blank qualifications due to NAD exceedances are summarized in the following table.

Normalized Absolute Difference	Qualification
> 2.58	None
NAD > 1.96 but < 2.58	J

Released to Imaging: 5/27/2022 3:16:29 PM

Normalized Absolute Difference	Qualification
NAD < 1.96	J*

Notes:
* Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient, the validator may determine the result should be qualified as rejected, ("R").

If the blank result exceeds the control limits, individual sample results may still be reportable if results are less than the MDC or greater than 10 times the blank result. Relative sizes of the sample and blank aliquots must be factored when making this determination (raw counts). In accordance with the QAPP, if radium-226 is detected using Method 901.1 in a blank at > 0.5 or < -0.5 pico Curie per gram (pCi/g), all sample results are qualified as not detected (UB), and if radium-226 is detected using Method 903.0 in a blank at > 2.3 or < -2.3 pico Curie per liter (pCi/L), all sample results are qualified as not detected (UB).

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: The blanks associated with the samples were determined to be not detected for all analytes; therefore, detected sample results are not associated with blank contamination.

3. Laboratory Duplicate Sample Analysis

Laboratory duplicate sample data are used to assess the precision of the analytical method.

The laboratory duplicate sample relative percent difference (RPD) control limit of 64 percent is applied when the average of the parent and duplicate sample concentrations are at least 1 pCi/g for soil matrices, or 5 pCi/L for water matrices. When the average of the results is less than 1 pCi/g for soil matrices or 5 pCi/L for water matrices, the difference between the results must be less than 0.6 pCi/g or 3.2 pCi/L (appropriately).

SDGs# 560-92998-1, 560-93041-1, 560-93104-1 and 560-93140-1: The laboratory duplicate analysis was not performed on samples from with this SDG.

SDG# 560-93106-1: The laboratory duplicate analysis was performed on sample Cell 35 -BG-S-3-4-210308. Laboratory duplicate analysis exhibited acceptable RPD.

4. Laboratory Control Sample Analysis

Laboratory control sample (LCS) analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit recoveries between the control limits of 55 and 145 percent.

SDGs# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: The LCS analyses exhibited recoveries within the control limits.

5. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. For results greater than five times the RL or MDC, a control limit of 50 percent for soil matrices is applied to the RPD between the parent and field duplicate sample results. If the parent and field duplicate sample results are less than five times the RL, for soil matrices a control limit of three times the RL is applied to the difference between the results.

SDG# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

Released to Imaging: 5/27/2022 3:16:29 PM

6. Isotope Identification

Sample results are qualified as non-detects if either of the following criteria are true:

1. Sample result is less than the uncertainty and the MDC.
2. Sample result has an uncertainty greater than the result (or indistinguishable from background) or the result is between the uncertainty and the MDC.

If the sample result is less than the MDC and the result is less than the RL (0.5 pCi/g) the result is qualified as non-detect (U). If the result is less than the MDC and greater than the RL, the result is reported as estimated non-detect (UJ).

Quantitative uncertainty is associated with sample results less than 1pCi/g and a reported uncertainty greater than 0.15 pCi/g or results greater than 1 pCi/g with a reported uncertainty greater than 0.15 times the result. These results are qualified "Q".

Sample results which exhibited uncertainty greater than the specified limits were qualified “Q” as documented in the following table.

SDG No.	Sample	Analyte	Result (pCi/g)	Uncertainty	MDC
560-92998-1	Cell 31-BG-S-3-4-210303	Radium-226	0.788	0.136	0.0433
560-93041-1	Cell 37 -BG-S-3-4-210304	Radium-226	0.366	0.135	0.126
	Cell 33 -BG-S-3-4-210304	Radium-226	0.297	0.140	0.165
560-93104-1	Cell 38 -BG-S-3-4-210305	Radium-226	0.447	0.108	0.0616
560-93106-1	Cell 39 -BG-S-3-4-210308	Radium-226	0.677	0.124	0.0808
		Radium-228	0.219	0.0994	0.142
560-93140-1	Cell 40-BG-S-3-4-210309	Radium-226	0.722	0.137	0.0975

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

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DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR RADIOLOGICAL ANALYSES

Radiological: GA-01-R	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Gamma Spectroscopy					
Tier II Validation					
Holding Times		X		X	
Reporting Limits (Units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment and/or Field Blanks	X				X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Laboratory Duplicate Sample RPD		X		X	
Field Duplicate Sample RPD	X				X
Isotope Identification		X	X		

Note:
%R = percent recovery
RPD = relative percent difference

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DATA REVIEW REPORT

GENERAL CHEMISRTY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
pH by SW846 9045D	Soil	7 days from collection to analysis	None
Phenolics by 9065	Soil	28 days from collection to analysis	Cool to <6 °C; preserved to a pH of less than 4.
Chloride, Fluoride and Sulfate by 9056A	Soil	28 days from collection to analysis	Cool to <6 °C.
Nitrite as N by 9056A	Soil	48 hours from collection to analysis	Cool to <6 °C.
Nitrate as N by 9056A	Soil	48 hours from collection to analysis	Cool to <6 °C.
Nitrate Nitrite as N by 9056A	Soil	28 days from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times with the exceptions noted below.

SDG No.	Sample ID	Analyte	Holding Time	Criteria
560-92998-1	Cell 29-BG-S-3-4-210302 Cell 30-BG-S-3-4-210302 Cell 31-BG-S-3-4-210303 Cell 32-BG-S-3-4-210303	Nitrite as N Nitrate as N	~20 days from collection to extraction	48 hours from collection to analysis
560-93041-1	Cell 37 -BG-S-3-4-210304 Cell 33 -BG-S-3-4-210304	Nitrite as N Nitrate as N	~14 days from collection to extraction	48 hours from collection to analysis
560-93104-1	Cell 38 -BG-S-3-4-210305 Cell 34 -BG-S-3-4-210305	Nitrite as N Nitrate as N	~14 days from collection to extraction	48 hours from collection to analysis
		pH	~ 11 days from collection to analysis	7 days from collection to analysis
560-93106-1	Cell 35 -BG-S-3-4-210308 Cell 39 -BG-S-3-4-210308	Nitrite as N Nitrate as N	~14 days from collection to extraction	48 hours from collection to analysis
		pH	~ 8 days from collection to analysis	7 days from collection to analysis
560-93140-1	Cell 36-BG-S-3-4-210309	Nitrite as N Nitrate as N	~9 days from collection to extraction	48 hours from collection to analysis
	Cell 40-BG-S-3-4-210309			

Sample results associated with sample locations analyzed by analytical method SW-846 8082A were qualified, as specified in the table below. All other holding times were met.

Criteria	Qualification	
	Detected Analytes	Non-detect Analytes
Analysis completed less than two times holding time	J	UJ
Analysis completed greater than two times holding time	J	R

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is

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compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDG# 560-92998-1: Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

All analytes associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the analytes listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) from the data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

SDG No.	Sample ID	Analytes	Sample Result	Qualification
560-93041-1	Cell 37 -BG-S-3-4-210304 Cell 33 -BG-S-3-4-210304	Nitrite as N	Detected sample results <RL and <BAL	"UB" at the RL
		Nitrate Nitrite as N	Detected sample results >RL and <BAL	"UB" at the RL
560-93104-1	Cell 38 -BG-S-3-4-210305 Cell 34 -BG-S-3-4-210305	Nitrate Nitrite as N	Detected sample results >RL and <BAL	"UB" at the RL
560-93106-1	Cell 35 -BG-S-3-4-210308	Nitrate Nitrite as N	Detected sample results >RL and <BAL	"UB" at the RL
	Cell 39 -BG-S-3-4-210308	Nitrite as N	Detected sample results >RL and <BAL	"UB" at the RL
		Nitrate Nitrite as N	Detected sample results >RL and <BAL	"UB" at the RL
560-93140-1	Cell 36-BG-S-3-4-210309	Nitrate Nitrite as N	Detected sample results >RL and <BAL	"UB" at the RL

Note:

RL = reporting limit

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

SDG# 560-93041-1, 560-93104-1: The MS/MSD analysis was not performed on a sample from these SDG.

SDG# 560-92998-1: The MS/MSD analysis was performed on sample Cell 32-BG-S-3-4-210303 for cyanide total, anions, and on sample Cell 30-BG-S-3-4-210302 for phenols total. MS/MSD analysis exhibited acceptable recoveries and RPDs.

SDG# 560-93106-1: The MS/MSD analysis was performed on sample Cell 35 -BG-S-3-4-210308 for phenol total. MS/MSD analysis exhibited acceptable recoveries and RPDs with the exceptions noted below.

Sample ID	Analytes	MS Recovery	MSD Recovery
Cell 35 -BG-S-3-4-210308	Phenol	158%	163%

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The criteria used to evaluate MS recoveries are presented in the following table. In the case of an MS deviation, the sample results are qualified. The qualifications are applied to all sample results associated with this SDG.

Control limit	Sample Result	Qualification
MS percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS percent recovery <30%	Non-detect	R
	Detect	J
MS percent recovery >125%	Non-detect	No Action
	Detect	J

SDG# 560-93140-1: The MS/MSD analysis was performed on sample Cell 40-BG-S-3-4-210309 for anions. MS/MSD analysis exhibited acceptable recoveries and RPDs.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL for soil matrices.

SDG# 560-93041-1, 560-93106-1 and 560-93140-1: A laboratory duplicate sample was not performed on samples from this SDG.

SDG# 560-92998-1: Laboratory duplicate analysis was performed on sample Cell 30-BG-S-3-4-210302 for pH. Laboratory duplicate analysis exhibited acceptable RPD.

SDG# 560-93104-1: Laboratory duplicate analysis was performed on sample Cell 38 -BG-S-3-4-210305 for pH. Laboratory duplicate analysis exhibited acceptable RPD.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for soil matrices.

SDG# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: A field duplicate sample was not collected for the samples from these SDGs.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

SDG# 560-92998-1, 560-93041-1, 560-93104-1, 560-93106-1 and 560-93140-1: The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

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DATA REVIEW REPORT

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: 9012B, 9045D, 9065 and 9056A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X	X		
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Equipment blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:
%R = percent recovery
RPD = relative percent difference

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DATA REVIEW REPORT

VALIDATION PERFORMED BY: Prashanth.K

SIGNATURE: 

DATE: May 28, 2021

PEER REVIEW: Dennis Capria

DATE: June 18, 2021

CHAIN OF CUSTODY AND CORRECTED SAMPLE ANALYSIS DATA SHEETS

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 92998

Address: 630 Plaza Drive Suite 100	Due Date Requested:
City: Highlands Ranch	TAT Requested (days): Std
State, Zip: CO, 80129-2377	PO #:
Phone: 303-710-7537(Tel)	WO #:
Email: Alison.Schaffer@arcadis.com	Project #: 56008683
Project Name: Chevron - Jal Land Farm Soils	SSOW#:
Site: Chevron Land farm	

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
Cell 30-BG-S-3-4-210302	3/02/21	1540	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell 29-BG-S-3-4-210302	3/02/21	1140	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	

Loc: 560
92998

560-92998 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/2/21 1700	Arcadis		3/3/21 1310	EX
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.4 IR-13 1.0 CF

Ver: 01/16/2019

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Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 92998
Address: 630 Plaza Drive Suite 100	Due Date Requested: —			
City: Highlands Ranch	TAT Requested (days): Std			
State, Zip: CO, 80129-2377	PO #:			
Phone: 303-710-7537(Tel)	WO #:			
Email: Alison.Schaffer@arcadis.com	Project #: 56008683			
Project Name: Chevron - Jal Land Farm Soils	SSOW#:			
Site: Jal Landfarm				

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
Cell 31-BG-S-3-4-210303	3/3/21	1215	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell 32-BG-S-3-4-210303	3/3/21	1440	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank	—	—	—	Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	

3/03/21

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	3/03/21 1700	Arcadis		3/4/21 1140	EX
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.4 IR-13 2.1 CF

Ver: 01/16/2019

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

LCMS

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302
Lab Sample ID: 560-92998-1
Date Collected: 03/02/21 15:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.729	U	4.99	0.729	ug/Kg			03/06/21 18:08	1
Chloromethane	1.20	U	4.99	1.20	ug/Kg			03/06/21 18:08	1
Vinyl chloride	0.599	U	4.99	0.599	ug/Kg			03/06/21 18:08	1
Bromomethane	1.10	U	4.99	1.10	ug/Kg			03/06/21 18:08	1
Trichlorofluoromethane	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
Acrolein	8.58	U	49.9	8.58	ug/Kg			03/06/21 18:08	1
1,1-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
trans-1,2-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
Methyl tert-butyl ether	0.609	U	4.99	0.609	ug/Kg			03/06/21 18:08	1
1,3-Dichlorobenzene	0.309	U	4.99	0.309	ug/Kg			03/06/21 18:08	1
Methylene Chloride	4.99	U	25.0	4.99	ug/Kg			03/06/21 18:08	1
Acrylonitrile	3.59	U	49.9	3.59	ug/Kg			03/06/21 18:08	1
cis-1,2-Dichloroethene	0.569	U	4.99	0.569	ug/Kg			03/06/21 18:08	1
Carbon tetrachloride	0.509	U	4.99	0.509	ug/Kg			03/06/21 18:08	1
Benzene	0.629	U	4.99	0.629	ug/Kg			03/06/21 18:08	1
1,2-Dichloroethane	0.519	U	4.99	0.519	ug/Kg			03/06/21 18:08	1
Trichloroethene	0.279	U	4.99	0.279	ug/Kg			03/06/21 18:08	1
1,1,1-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
1,1-Dichloroethane	0.589	U	4.99	0.589	ug/Kg			03/06/21 18:08	1
1,2-Dichloropropane	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
1,4-Dioxane	19.0	U	99.8	19.0	ug/Kg			03/06/21 18:08	1
Chloroform	0.868	U	4.99	0.868	ug/Kg			03/06/21 18:08	1
Bromodichloromethane	0.200	U	4.99	0.200	ug/Kg			03/06/21 18:08	1
1,1-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/06/21 18:08	1
cis-1,3-Dichloropropene	0.449	U	4.99	0.449	ug/Kg			03/06/21 18:08	1
Toluene	0.898	U	4.99	0.898	ug/Kg			03/06/21 18:08	1
trans-1,3-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/06/21 18:08	1
1,1,2-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/06/21 18:08	1
Tetrachloroethene	0.739	U	4.99	0.739	ug/Kg			03/06/21 18:08	1
1,3-Dichloropropene, Total	0.519	U	4.99	0.519	ug/Kg			03/06/21 18:08	1
1,2-Dibromoethane	0.299	U	4.99	0.299	ug/Kg			03/06/21 18:08	1
Monochlorobenzene	0.299	U	4.99	0.299	ug/Kg			03/06/21 18:08	1
Ethylbenzene	0.449	U	4.99	0.449	ug/Kg			03/06/21 18:08	1
Xylenes, Total	0.499	U	9.98	0.499	ug/Kg			03/06/21 18:08	1
Styrene	0.299	U	4.99	0.299	ug/Kg			03/06/21 18:08	1
Tribromomethane	0.509	U	4.99	0.509	ug/Kg			03/06/21 18:08	1
1,1,2,2-Tetrachloroethane	0.379	U	4.99	0.379	ug/Kg			03/06/21 18:08	1
1,4-Dichlorobenzene	0.319	U	4.99	0.319	ug/Kg			03/06/21 18:08	1
1,2-Dichlorobenzene	0.250	U	4.99	0.250	ug/Kg			03/06/21 18:08	1
1,2,4-Trichlorobenzene	0.968	U	4.99	0.968	ug/Kg			03/06/21 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*65 - 152*		*03/06/21 18:08*	*1*
Toluene-d8 (Surr)	*99*		*65 - 139*		*03/06/21 18:08*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.3	11.9	ug/Kg		03/16/21 09:20	03/17/21 18:17	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302
Lab Sample ID: 560-92998-1
Date Collected: 03/02/21 15:40
Matrix: Solid
Date Received: 03/04/21 11:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	88		30 - 164	03/16/21 09:20	03/17/21 18:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00981	U	0.314	0.00981	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Acenaphthylene	0.0782	U	0.314	0.0782	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Anthracene	0.0162	U	0.314	0.0162	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzidine	0.943	U	3.14	0.943	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzo[a]anthracene	0.0190	U	0.314	0.0190	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzo[b]fluoranthene	0.0250	U	0.314	0.0250	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzo[k]fluoranthene	0.0381	U	0.314	0.0381	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzo[g,h,i]perylene	0.0152	U	0.314	0.0152	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Benzo[a]pyrene	0.0190	U	0.314	0.0190	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Bis(2-chloroethyl)ether	0.0158	U ↘ UJ	0.314	0.0158	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Di (2-ethylhexyl)phthalate	**0.169**	**J**	0.314	0.0438	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Chrysene	0.0257	U	0.314	0.0257	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dibenz(a,h)anthracene	0.0181	U	0.314	0.0181	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dichlorobenzidine, 3,3'-	0.0857	U	0.629	0.0857	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Diethyl phthalate	0.0248	U	0.629	0.0248	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dimethyl phthalate	0.0219	U	0.314	0.0219	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dibutylphthalate	0.0276	U	0.314	0.0276	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
2,4-Dinitrotoluene	0.0629	U	0.314	0.0629	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
2,6-Dinitrotoluene	0.0267	U	0.314	0.0267	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0210	U	0.314	0.0210	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Fluoranthene	0.0343	U	0.314	0.0343	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Fluorene	0.0171	U	0.314	0.0171	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Hexachlorobenzene	0.0276	U	0.314	0.0276	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Hexachlorobutadiene	0.00952	U ↘ UJ	0.314	0.00952	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Hexachlorocyclopentadiene	0.106	U	1.52	0.106	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Hexachloroethane	0.0203	U ↘ UJ	0.314	0.0203	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Indeno[1,2,3-cd]pyrene	0.0210	U	0.314	0.0210	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Isophorone	0.0162	U ↘ UJ	0.314	0.0162	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
1-Methylnaphthalene	0.0107	U	0.314	0.0107	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
2-Methylnaphthalene	0.0181	U ↘ UJ	0.314	0.0181	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Naphthalene	0.0295	U ↘ UJ	0.314	0.0295	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Nitrobenzene	0.0210	U	0.314	0.0210	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
N-Nitrosodi-n-butylamine	0.0921	U	0.314	0.0921	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
N-Nitrosodiethylamine	0.0619	U	0.314	0.0619	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
N-Nitrosodimethylamine	0.0352	U ↘ UJ	0.314	0.0352	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
N-Nitrosodiphenylamine	0.0200	U	0.314	0.0200	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
N-Nitrosopyrrolidine	0.0610	U	0.314	0.0610	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Pentachlorobenzene	0.0619	U	0.314	0.0619	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Phenanthrene	0.0162	U	0.314	0.0162	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Pyrene	0.0115	U	0.314	0.0115	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
1,2,4,5-Tetrachlorobenzene	0.0467	U ↘ UJ	0.314	0.0467	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
2,4-Dichlorophenol	0.00952	U ↘ UJ	0.314	0.00952	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dinitrophenols	0.317	U	1.52	0.317	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Dinitro-o-cresol	0.314	U	1.52	0.314	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Pentachlorophenol	0.314	U	1.52	0.314	mg/Kg		03/16/21 15:25	03/24/21 03:22	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302 Lab Sample ID: 560-92998-1

Date Collected: 03/02/21 15:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.00952	U	0.314	0.00952	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
2,4,5-Trichlorophenol	0.00952	U	0.314	0.00952	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
Atrazine	0.0352	U	0.314	0.0352	mg/Kg		03/16/21 15:25	03/24/21 03:22	1
bis (2-chloroisopropyl) ether	0.0219	U	0.314	0.0219	mg/Kg		03/16/21 15:25	03/24/21 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*52*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*
2-Fluorobiphenyl	*55*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*
Terphenyl-d14	*72*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*
Phenol-d5 (Surr)	*55*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*
2-Fluorophenol	*53*		*43 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*
2,4,6-Tribromophenol	*57*		*35 - 120*	*03/16/21 15:25*	*03/24/21 03:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0639	U	0.0996	0.0639	mg/Kg		03/11/21 09:04	03/11/21 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*20 - 140*	*03/11/21 09:04*	*03/11/21 13:17*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.7	U	50.2	34.7	mg/Kg		03/09/21 09:20	03/10/21 10:19	1
C28-C36	34.7	U	50.2	34.7	mg/Kg		03/09/21 09:20	03/10/21 10:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*40*		*39 - 120*	*03/09/21 09:20*	*03/10/21 10:19*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.894	U	4.91	0.894	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Hexachlorocyclohexane, gamma-	1.76	U	4.91	1.76	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Hexachlorocyclohexane, beta-	1.70	U	4.91	1.70	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Hexachlorocyclohexane, delta-	1.66	U	4.91	1.66	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Heptachlor	1.55	U	4.91	1.55	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Aldrin	0.756	U	4.91	0.756	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Heptachlor epoxide	1.41	U	4.91	1.41	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Endosulfan I	1.18	U	4.91	1.18	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Dieldrin	1.08	U	4.91	1.08	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Endrin	1.87	U	4.91	1.87	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Endosulfan II	1.45	U	4.91	1.45	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
DDT	1.11	U	4.91	1.11	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Endrin aldehyde	1.29	U	4.91	1.29	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Endosulfan sulfate	1.26	U	4.91	1.26	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Chlordane (technical)	11.8	U	49.1	11.8	ug/Kg		03/09/21 08:55	03/12/21 22:23	1
Toxaphene	24.6	U	98.2	24.6	ug/Kg		03/09/21 08:55	03/12/21 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*30 - 120*	*03/09/21 08:55*	*03/12/21 22:23*	*1*
DCB Decachlorobiphenyl	*78*		*13 - 135*	*03/09/21 08:55*	*03/12/21 22:23*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302
Lab Sample ID: 560-92998-1
Date Collected: 03/02/21 15:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1221	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1232	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1242	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1248	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1254	0.00531	U	0.0344	0.00531	mg/Kg		03/19/21 07:31	03/19/21 16:23	1
Aroclor 1260	0.0104	U	0.0344	0.0104	mg/Kg		03/19/21 07:31	03/19/21 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*32 - 132*	*03/19/21 07:31*	*03/19/21 16:23*	*1*
DCB Decachlorobiphenyl	*69*		*57 - 138*	*03/19/21 07:31*	*03/19/21 16:23*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0217	U	0.0956	0.0217	mg/Kg		03/16/21 15:34	03/18/21 06:01	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0411	U	0.191	0.0411	mg/Kg		03/16/21 15:34	03/18/21 06:01	1
2,4,6-Trinitrotoluene	0.0293	U	0.0956	0.0293	mg/Kg		03/16/21 15:34	03/18/21 06:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 06:01*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.223**	**J**	0.492	0.0811	ug/Kg		03/11/21 12:20	03/12/21 20:04	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.213	U	0.742	0.213	ug/Kg		03/16/21 13:05	04/01/21 11:43	1
Perfluorohexanesulfonic acid (PFHxS)	0.260	U	0.742	0.260	ug/Kg		03/16/21 13:05	04/01/21 11:43	1
Perfluorooctanesulfonic acid (PFOS)	0.130	U	0.742	0.130	ug/Kg		03/16/21 13:05	04/01/21 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 11:43*	*1*
13C8 PFOS	*100*		*70 - 130*	*03/16/21 13:05*	*04/01/21 11:43*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.703	U	1.87	0.703	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Arsenic	3.75	U	9.37	3.75	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Barium	**280**	J	18.7	4.69	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Beryllium	0.375	U	0.937	0.375	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Cadmium	0.225	U	0.469	0.225	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Chromium	4.22	U	9.37	4.22	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Iron	**2670**	J	112	56.2	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Copper	3.75	U	9.37	3.75	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Manganese	**31.9**		4.69	1.87	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Lead	**1.98**	**J**	2.81	1.17	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Antimony	1.87	U UJ	4.69	1.87	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Selenium	3.00	U	4.69	3.00	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Thallium	1.87	U	4.69	1.87	mg/Kg		03/19/21 09:44	03/22/21 17:42	20

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 30-BG-S-3-4-210302 Lab Sample ID: 560-92998-1

Date Collected: 03/02/21 15:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	18.7	U	46.9	18.7	mg/Kg		03/19/21 09:44	03/22/21 17:42	20
Uranium	**0.414**	**J**	0.937	0.375	mg/Kg		03/19/21 09:44	03/22/21 17:42	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0143~~	~~J b~~ 0.0321 UBJ	0.0321	0.0107	mg/Kg		03/24/21 17:26	03/24/21 20:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.164	U	0.431	0.164	mg/Kg		03/11/21 09:04	03/11/21 11:06	1
pH	**8.0**	**HF**	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29.3**		9.93	4.90	mg/Kg			03/22/21 17:57	1
~~Nitrite as N~~	~~0.861~~	~~U~~	~~4.97~~	~~0.861~~	~~mg/Kg~~			~~03/22/21 17:57~~	~~1~~ R
Fluoride	**5.58**		0.497	0.332	mg/Kg			03/22/21 17:57	1
Nitrate as N	**1.56**	**J**	4.97	1.40	mg/Kg			03/22/21 17:57	1
Nitrate Nitrite as N	**1.56**	**J**	4.97	0.274	mg/Kg			03/22/21 17:57	1
Sulfate	**158**		9.93	3.86	mg/Kg			03/22/21 17:57	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**160**		20.0	20.0	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.817**		0.177	0.196	1.00	0.138	pCi/g	03/11/21 17:46	04/01/21 10:09	1
Radium-228	0.170	U	0.0933	0.0948		0.377	pCi/g	03/11/21 17:46	04/01/21 10:09	1
Combined Radium 226 + 228	**0.987**		0.200	0.218		0.377	pCi/g	03/11/21 17:46	04/01/21 10:09	1

Client Sample ID: Cell 29-BG-S-3-4-210302 Lab Sample ID: 560-92998-2

Date Collected: 03/02/21 11:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.717	U	4.91	0.717	ug/Kg			03/06/21 18:34	1
Chloromethane	1.18	U	4.91	1.18	ug/Kg			03/06/21 18:34	1
Vinyl chloride	0.589	U	4.91	0.589	ug/Kg			03/06/21 18:34	1
Bromomethane	1.08	U	4.91	1.08	ug/Kg			03/06/21 18:34	1
Trichlorofluoromethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
Acrolein	8.45	U	49.1	8.45	ug/Kg			03/06/21 18:34	1
1,1-Dichloroethene	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
trans-1,2-Dichloroethene	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
Methyl tert-butyl ether	0.599	U	4.91	0.599	ug/Kg			03/06/21 18:34	1
1,3-Dichlorobenzene	0.305	U	4.91	0.305	ug/Kg			03/06/21 18:34	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 29-BG-S-3-4-210302
Lab Sample ID: 560-92998-2
Date Collected: 03/02/21 11:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	4.91	U	24.6	4.91	ug/Kg			03/06/21 18:34	1
Acrylonitrile	3.54	U	49.1	3.54	ug/Kg			03/06/21 18:34	1
cis-1,2-Dichloroethene	0.560	U	4.91	0.560	ug/Kg			03/06/21 18:34	1
Carbon tetrachloride	0.501	U	4.91	0.501	ug/Kg			03/06/21 18:34	1
Benzene	0.619	U	4.91	0.619	ug/Kg			03/06/21 18:34	1
1,2-Dichloroethane	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:34	1
Trichloroethene	0.275	U	4.91	0.275	ug/Kg			03/06/21 18:34	1
1,1,1-Trichloroethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
1,1-Dichloroethane	0.580	U	4.91	0.580	ug/Kg			03/06/21 18:34	1
1,2-Dichloropropane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
1,4-Dioxane	18.7	U	98.2	18.7	ug/Kg			03/06/21 18:34	1
Chloroform	0.855	U	4.91	0.855	ug/Kg			03/06/21 18:34	1
Bromodichloromethane	0.196	U	4.91	0.196	ug/Kg			03/06/21 18:34	1
1,1-Dichloropropene	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:34	1
cis-1,3-Dichloropropene	0.442	U	4.91	0.442	ug/Kg			03/06/21 18:34	1
Toluene	0.884	U	4.91	0.884	ug/Kg			03/06/21 18:34	1
trans-1,3-Dichloropropene	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:34	1
1,1,2-Trichloroethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:34	1
Tetrachloroethene	0.727	U	4.91	0.727	ug/Kg			03/06/21 18:34	1
1,3-Dichloropropene, Total	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:34	1
1,2-Dibromoethane	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:34	1
Monochlorobenzene	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:34	1
Ethylbenzene	0.442	U	4.91	0.442	ug/Kg			03/06/21 18:34	1
Xylenes, Total	0.491	U	9.82	0.491	ug/Kg			03/06/21 18:34	1
Styrene	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:34	1
Tribromomethane	0.501	U	4.91	0.501	ug/Kg			03/06/21 18:34	1
1,1,2,2-Tetrachloroethane	0.373	U	4.91	0.373	ug/Kg			03/06/21 18:34	1
1,4-Dichlorobenzene	0.314	U	4.91	0.314	ug/Kg			03/06/21 18:34	1
1,2-Dichlorobenzene	0.246	U	4.91	0.246	ug/Kg			03/06/21 18:34	1
1,2,4-Trichlorobenzene	0.953	U	4.91	0.953	ug/Kg			03/06/21 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*65 - 152*		*03/06/21 18:34*	*1*
Toluene-d8 (Surr)	*98*		*65 - 139*		*03/06/21 18:34*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.8	U	64.8	11.8	ug/Kg		03/16/21 09:20	03/17/21 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*98*		*30 - 164*	*03/16/21 09:20*	*03/17/21 18:42*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0100	U	0.320	0.0100	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Acenaphthylene	0.0797	U	0.320	0.0797	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Anthracene	0.0165	U	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Benzidine	0.961	U	3.20	0.961	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Benzo[a]anthracene	0.0194	U	0.320	0.0194	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Benzo[b]fluoranthene	0.0254	U	0.320	0.0254	mg/Kg		03/16/21 15:25	03/24/21 03:46	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 29-BG-S-3-4-210302
Lab Sample ID: 560-92998-2
Date Collected: 03/02/21 11:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.0388	U	0.320	0.0388	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Benzo[g,h,i]perylene	0.0155	U	0.320	0.0155	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Benzo[a]pyrene	0.0194	U	0.320	0.0194	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Bis(2-chloroethyl)ether	0.0161	U UJ	0.320	0.0161	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Di (2-ethylhexyl)phthalate	**0.203**	**J**	0.320	0.0447	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Chrysene	0.0262	U	0.320	0.0262	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dibenz(a,h)anthracene	0.0184	U	0.320	0.0184	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dichlorobenzidine, 3,3'-	0.0874	U	0.641	0.0874	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Diethyl phthalate	0.0252	U	0.641	0.0252	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dimethyl phthalate	0.0223	U	0.320	0.0223	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dibutylphthalate	0.0282	U	0.320	0.0282	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2,4-Dinitrotoluene	0.0641	U	0.320	0.0641	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2,6-Dinitrotoluene	0.0272	U	0.320	0.0272	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Fluoranthene	0.0350	U	0.320	0.0350	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Fluorene	0.0175	U	0.320	0.0175	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Hexachlorobenzene	0.0282	U	0.320	0.0282	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Hexachlorobutadiene	0.00971	U UJ	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Hexachlorocyclopentadiene	0.108	U	1.55	0.108	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Hexachloroethane	0.0207	U UJ	0.320	0.0207	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Indeno[1,2,3-cd]pyrene	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Isophorone	0.0165	U UJ	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
1-Methylnaphthalene	0.0109	U	0.320	0.0109	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2-Methylnaphthalene	0.0184	U UJ	0.320	0.0184	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Naphthalene	0.0301	U UJ	0.320	0.0301	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Nitrobenzene	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
N-Nitrosodi-n-butylamine	0.0939	U	0.320	0.0939	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
N-Nitrosodiethylamine	0.0631	U	0.320	0.0631	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
N-Nitrosodimethylamine	0.0359	U UJ	0.320	0.0359	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
N-Nitrosodiphenylamine	0.0204	U	0.320	0.0204	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
N-Nitrosopyrrolidine	0.0621	U	0.320	0.0621	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Pentachlorobenzene	0.0631	U	0.320	0.0631	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Phenanthrene	0.0165	U	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Pyrene	0.0117	U	0.320	0.0117	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
1,2,4,5-Tetrachlorobenzene	0.0476	U UJ	0.320	0.0476	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2,4-Dichlorophenol	0.00971	U UJ	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dinitrophenols	0.323	U	1.55	0.323	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Dinitro-o-cresol	0.320	U	1.55	0.320	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Pentachlorophenol	0.320	U	1.55	0.320	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2,4,6-Trichlorophenol	0.00971	U	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
2,4,5-Trichlorophenol	0.00971	U	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
Atrazine	0.0359	U	0.320	0.0359	mg/Kg		03/16/21 15:25	03/24/21 03:46	1
bis (2-chloroisopropyl) ether	0.0223	U	0.320	0.0223	mg/Kg		03/16/21 15:25	03/24/21 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*50*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*
2-Fluorobiphenyl	*54*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*
Terphenyl-d14	*70*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*
Phenol-d5 (Surr)	*53*		*46 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 29-BG-S-3-4-210302
Lab Sample ID: 560-92998-2
Date Collected: 03/02/21 11:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*50*		*43 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*
2,4,6-Tribromophenol	*57*		*35 - 120*	*03/16/21 15:25*	*03/24/21 03:46*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0637	U	0.0992	0.0637	mg/Kg		03/11/21 09:04	03/11/21 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*77*		*20 - 140*	*03/11/21 09:04*	*03/11/21 15:06*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	35.2	U	50.9	35.2	mg/Kg		03/09/21 09:20	03/10/21 10:47	1
C28-C36	35.2	U	50.9	35.2	mg/Kg		03/09/21 09:20	03/10/21 10:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*55*		*39 - 120*	*03/09/21 09:20*	*03/10/21 10:47*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.883	U	4.85	0.883	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Hexachlorocyclohexane, gamma-	1.74	U	4.85	1.74	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Hexachlorocyclohexane, beta-	1.68	U	4.85	1.68	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Hexachlorocyclohexane, delta-	1.64	U	4.85	1.64	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Heptachlor	1.53	U	4.85	1.53	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Aldrin	0.748	U	4.85	0.748	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Heptachlor epoxide	1.40	U	4.85	1.40	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Endosulfan I	1.17	U	4.85	1.17	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Dieldrin	1.07	U	4.85	1.07	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Endrin	1.84	U	4.85	1.84	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Endosulfan II	1.44	U	4.85	1.44	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
DDT	1.10	U	4.85	1.10	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Endrin aldehyde	1.27	U	4.85	1.27	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Endosulfan sulfate	1.24	U	4.85	1.24	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Chlordane (technical)	11.7	U	48.5	11.7	ug/Kg		03/11/21 08:26	03/15/21 19:32	1
Toxaphene	24.3	U	97.1	24.3	ug/Kg		03/11/21 08:26	03/15/21 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*30 - 120*	*03/11/21 08:26*	*03/15/21 19:32*	*1*
DCB Decachlorobiphenyl	*94*		*13 - 135*	*03/11/21 08:26*	*03/15/21 19:32*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1221	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1232	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1242	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1248	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1254	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:30	1
Aroclor 1260	0.00987	U	0.0326	0.00987	mg/Kg		03/19/21 07:31	03/19/21 17:30	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 29-BG-S-3-4-210302
Lab Sample ID: 560-92998-2
Date Collected: 03/02/21 11:40
Matrix: Solid
Date Received: 03/04/21 11:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*73*		*32 - 132*	*03/19/21 07:31*	*03/19/21 17:30*	*1*
DCB Decachlorobiphenyl	*65*		*57 - 138*	*03/19/21 07:31*	*03/19/21 17:30*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0225	U	0.0991	0.0225	mg/Kg		03/16/21 15:34	03/18/21 06:24	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0426	U	0.198	0.0426	mg/Kg		03/16/21 15:34	03/18/21 06:24	1
2,4,6-Trinitrotoluene	0.0304	U	0.0991	0.0304	mg/Kg		03/16/21 15:34	03/18/21 06:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 06:24*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0821	U	0.498	0.0821	ug/Kg		03/11/21 12:20	03/12/21 20:19	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.226	U	0.785	0.226	ug/Kg		03/16/21 13:05	04/01/21 12:09	1
Perfluorohexanesulfonic acid (PFHxS)	0.275	U	0.785	0.275	ug/Kg		03/16/21 13:05	04/01/21 12:09	1
Perfluorooctanesulfonic acid (PFOS)	0.137	U	0.785	0.137	ug/Kg		03/16/21 13:05	04/01/21 12:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	*99*		*57 - 153*	*03/16/21 13:05*	*04/01/21 12:09*	*1*
13C8 PFOS	*103*		*70 - 130*	*03/16/21 13:05*	*04/01/21 12:09*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.697	U	1.86	0.697	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Arsenic	3.72	U	9.29	3.72	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Barium	**368**	J	18.6	4.65	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Beryllium	0.372	U	0.929	0.372	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Cadmium	0.223	U	0.465	0.223	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Chromium	4.18	U	9.29	4.18	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Iron	**2570**	J	111	55.7	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Copper	3.72	U	9.29	3.72	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Manganese	**23.5**		4.65	1.86	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Lead	**1.82**	J	2.79	1.16	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Antimony	1.86	~~U~~ UJ	4.65	1.86	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Selenium	2.97	U	4.65	2.97	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Thallium	1.86	U	4.65	1.86	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Zinc	18.6	U	46.5	18.6	mg/Kg		03/19/21 09:44	03/22/21 18:00	20
Uranium	**0.466**	J	0.929	0.372	mg/Kg		03/19/21 09:44	03/22/21 18:00	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0153~~ ~~J b~~	0.0322 UBJ	0.0322	0.0107	mg/Kg		03/24/21 17:26	03/24/21 20:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.170	U	0.446	0.170	mg/Kg		03/11/21 09:04	03/11/21 11:01	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 29-BG-S-3-4-210302
Lab Sample ID: 560-92998-2
Date Collected: 03/02/21 11:40
Matrix: Solid
Date Received: 03/04/21 11:40

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1	~~HF~~	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.11	J	9.79	4.83	mg/Kg			03/22/21 18:18	1
Nitrite as N	2.34	J	4.90	0.849	mg/Kg			03/22/21 18:18	1
Fluoride	3.21		0.490	0.327	mg/Kg			03/22/21 18:18	1
Nitrate as N	2.05	J	4.90	1.38	mg/Kg			03/22/21 18:18	1
Nitrate Nitrite as N	4.39	J	4.90	0.270	mg/Kg			03/22/21 18:18	1
Sulfate	28.1		9.79	3.81	mg/Kg			03/22/21 18:18	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	171		14.3	14.3	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.171	U	0.103	0.105	1.00	0.308	pCi/g	03/11/21 17:46	04/01/21 10:10	1
Radium-228	0.583		0.170	0.183		0.179	pCi/g	03/11/21 17:46	04/01/21 10:10	1
Combined Radium 226 + 228	0.753		0.199	0.211		0.308	pCi/g	03/11/21 17:46	04/01/21 10:10	1

Client Sample ID: Cell 31-BG-S-3-4-210303
Lab Sample ID: 560-92998-3
Date Collected: 03/03/21 12:15
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.717	U	4.91	0.717	ug/Kg			03/06/21 18:59	1
Chloromethane	1.18	U	4.91	1.18	ug/Kg			03/06/21 18:59	1
Vinyl chloride	0.589	U	4.91	0.589	ug/Kg			03/06/21 18:59	1
Bromomethane	1.08	U	4.91	1.08	ug/Kg			03/06/21 18:59	1
Trichlorofluoromethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1
Acrolein	8.45	U	49.1	8.45	ug/Kg			03/06/21 18:59	1
1,1-Dichloroethene	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1
trans-1,2-Dichloroethene	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1
Methyl tert-butyl ether	0.599	U	4.91	0.599	ug/Kg			03/06/21 18:59	1
1,3-Dichlorobenzene	0.305	U	4.91	0.305	ug/Kg			03/06/21 18:59	1
Methylene Chloride	4.91	U	24.6	4.91	ug/Kg			03/06/21 18:59	1
Acrylonitrile	3.54	U	49.1	3.54	ug/Kg			03/06/21 18:59	1
cis-1,2-Dichloroethene	0.560	U	4.91	0.560	ug/Kg			03/06/21 18:59	1
Carbon tetrachloride	0.501	U	4.91	0.501	ug/Kg			03/06/21 18:59	1
Benzene	0.619	U	4.91	0.619	ug/Kg			03/06/21 18:59	1
1,2-Dichloroethane	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:59	1
Trichloroethene	0.275	U	4.91	0.275	ug/Kg			03/06/21 18:59	1
1,1,1-Trichloroethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1
1,1-Dichloroethane	0.580	U	4.91	0.580	ug/Kg			03/06/21 18:59	1
1,2-Dichloropropane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303 Lab Sample ID: 560-92998-3

Date Collected: 03/03/21 12:15 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	18.7	U	98.2	18.7	ug/Kg			03/06/21 18:59	1
Chloroform	0.855	U	4.91	0.855	ug/Kg			03/06/21 18:59	1
Bromodichloromethane	0.196	U	4.91	0.196	ug/Kg			03/06/21 18:59	1
1,1-Dichloropropene	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:59	1
cis-1,3-Dichloropropene	0.442	U	4.91	0.442	ug/Kg			03/06/21 18:59	1
Toluene	0.884	U	4.91	0.884	ug/Kg			03/06/21 18:59	1
trans-1,3-Dichloropropene	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:59	1
1,1,2-Trichloroethane	0.491	U	4.91	0.491	ug/Kg			03/06/21 18:59	1
Tetrachloroethene	0.727	U	4.91	0.727	ug/Kg			03/06/21 18:59	1
1,3-Dichloropropene, Total	0.511	U	4.91	0.511	ug/Kg			03/06/21 18:59	1
1,2-Dibromoethane	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:59	1
Monochlorobenzene	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:59	1
Ethylbenzene	0.442	U	4.91	0.442	ug/Kg			03/06/21 18:59	1
Xylenes, Total	0.491	U	9.82	0.491	ug/Kg			03/06/21 18:59	1
Styrene	0.295	U	4.91	0.295	ug/Kg			03/06/21 18:59	1
Tribromomethane	0.501	U	4.91	0.501	ug/Kg			03/06/21 18:59	1
1,1,2,2-Tetrachloroethane	0.373	U	4.91	0.373	ug/Kg			03/06/21 18:59	1
1,4-Dichlorobenzene	0.314	U	4.91	0.314	ug/Kg			03/06/21 18:59	1
1,2-Dichlorobenzene	0.246	U	4.91	0.246	ug/Kg			03/06/21 18:59	1
1,2,4-Trichlorobenzene	0.953	U	4.91	0.953	ug/Kg			03/06/21 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*65 - 152*		*03/06/21 18:59*	*1*
Toluene-d8 (Surr)	*98*		*65 - 139*		*03/06/21 18:59*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	12.0	U	65.8	12.0	ug/Kg		03/16/21 09:20	03/17/21 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*102*		*30 - 164*	*03/16/21 09:20*	*03/17/21 19:07*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0100	U	0.320	0.0100	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Acenaphthylene	0.0797	U	0.320	0.0797	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Anthracene	0.0165	U	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzidine	0.961	U	3.20	0.961	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzo[a]anthracene	0.0194	U	0.320	0.0194	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzo[b]fluoranthene	0.0254	U	0.320	0.0254	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzo[k]fluoranthene	0.0388	U	0.320	0.0388	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzo[g,h,i]perylene	0.0155	U	0.320	0.0155	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Benzo[a]pyrene	0.0194	U	0.320	0.0194	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Bis(2-chloroethyl)ether	0.0161	U UJ	0.320	0.0161	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Di (2-ethylhexyl)phthalate	0.0447	U	0.320	0.0447	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Chrysene	0.0262	U	0.320	0.0262	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Dibenz(a,h)anthracene	0.0184	U	0.320	0.0184	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Dichlorobenzidine, 3,3'-	0.0874	U	0.641	0.0874	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Diethyl phthalate	0.0252	U	0.641	0.0252	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Dimethyl phthalate	0.0223	U	0.320	0.0223	mg/Kg		03/16/21 15:25	03/24/21 04:11	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303 Lab Sample ID: 560-92998-3

Date Collected: 03/03/21 12:15 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibutylphthalate	0.0282	U	0.320	0.0282	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2,4-Dinitrotoluene	0.0641	U	0.320	0.0641	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2,6-Dinitrotoluene	0.0272	U	0.320	0.0272	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Fluoranthene	0.0350	U	0.320	0.0350	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Fluorene	0.0175	U	0.320	0.0175	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Hexachlorobenzene	0.0282	U	0.320	0.0282	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Hexachlorobutadiene	0.00971	U UJ	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Hexachlorocyclopentadiene	0.108	U	1.55	0.108	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Hexachloroethane	0.0207	U UJ	0.320	0.0207	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Indeno[1,2,3-cd]pyrene	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Isophorone	0.0165	U UJ	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
1-Methylnaphthalene	0.0109	U	0.320	0.0109	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2-Methylnaphthalene	0.0184	U UJ	0.320	0.0184	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Naphthalene	0.0301	U UJ	0.320	0.0301	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Nitrobenzene	0.0214	U	0.320	0.0214	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
N-Nitrosodi-n-butylamine	0.0939	U	0.320	0.0939	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
N-Nitrosodiethylamine	0.0631	U	0.320	0.0631	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
N-Nitrosodimethylamine	0.0359	U UJ	0.320	0.0359	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
N-Nitrosodiphenylamine	0.0204	U	0.320	0.0204	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
N-Nitrosopyrrolidine	0.0621	U	0.320	0.0621	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Pentachlorobenzene	0.0631	U	0.320	0.0631	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Phenanthrene	0.0165	U	0.320	0.0165	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Pyrene	0.0117	U	0.320	0.0117	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
1,2,4,5-Tetrachlorobenzene	0.0476	U UJ	0.320	0.0476	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2,4-Dichlorophenol	0.00971	U UJ	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Dinitrophenols	0.323	U	1.55	0.323	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Dinitro-o-cresol	0.320	U	1.55	0.320	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Pentachlorophenol	0.320	U	1.55	0.320	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2,4,6-Trichlorophenol	0.00971	U	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
2,4,5-Trichlorophenol	0.00971	U	0.320	0.00971	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
Atrazine	0.0359	U	0.320	0.0359	mg/Kg		03/16/21 15:25	03/24/21 04:11	1
bis (2-chloroisopropyl) ether	0.0223	U	0.320	0.0223	mg/Kg		03/16/21 15:25	03/24/21 04:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*50*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*
2-Fluorobiphenyl	*53*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*
Terphenyl-d14	*66*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*
Phenol-d5 (Surr)	*52*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*
2-Fluorophenol	*50*		*43 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*
2,4,6-Tribromophenol	*51*		*35 - 120*	*03/16/21 15:25*	*03/24/21 04:11*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0629	U	0.0980	0.0629	mg/Kg		03/11/21 09:04	03/11/21 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*106*		*20 - 140*	*03/11/21 09:04*	*03/11/21 15:43*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303 Lab Sample ID: 560-92998-3

Date Collected: 03/03/21 12:15 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.9	U	49.0	33.9	mg/Kg		03/09/21 09:20	03/10/21 11:14	1
C28-C36	33.9	U	49.0	33.9	mg/Kg		03/09/21 09:20	03/10/21 11:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*75*		*39 - 120*	*03/09/21 09:20*	*03/10/21 11:14*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.920	U	5.06	0.920	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Hexachlorocyclohexane, gamma-	1.81	U	5.06	1.81	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Hexachlorocyclohexane, beta-	1.75	U	5.06	1.75	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Hexachlorocyclohexane, delta-	1.71	U	5.06	1.71	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Heptachlor	1.60	U	5.06	1.60	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Aldrin	0.779	U	5.06	0.779	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Heptachlor epoxide	1.46	U	5.06	1.46	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Endosulfan I	1.21	U	5.06	1.21	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Dieldrin	1.11	U	5.06	1.11	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Endrin	1.92	U	5.06	1.92	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Endosulfan II	1.50	U	5.06	1.50	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
DDT	1.14	U	5.06	1.14	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Endrin aldehyde	1.32	U	5.06	1.32	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Endosulfan sulfate	1.29	U	5.06	1.29	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Chlordane (technical)	12.1	U	50.6	12.1	ug/Kg		03/11/21 08:26	03/15/21 19:45	1
Toxaphene	25.3	U	101	25.3	ug/Kg		03/11/21 08:26	03/15/21 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*30 - 120*	*03/11/21 08:26*	*03/15/21 19:45*	*1*
DCB Decachlorobiphenyl	*86*		*13 - 135*	*03/11/21 08:26*	*03/15/21 19:45*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1221	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1232	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1242	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1248	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1254	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 17:53	1
Aroclor 1260	0.00989	U	0.0326	0.00989	mg/Kg		03/19/21 07:31	03/19/21 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*32 - 132*	*03/19/21 07:31*	*03/19/21 17:53*	*1*
DCB Decachlorobiphenyl	*81*		*57 - 138*	*03/19/21 07:31*	*03/19/21 17:53*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0225	U	0.0990	0.0225	mg/Kg		03/16/21 15:34	03/18/21 06:47	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0426	U	0.198	0.0426	mg/Kg		03/16/21 15:34	03/18/21 06:47	1
2,4,6-Trinitrotoluene	0.0304	U	0.0990	0.0304	mg/Kg		03/16/21 15:34	03/18/21 06:47	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303
Lab Sample ID: 560-92998-3
Date Collected: 03/03/21 12:15
Matrix: Solid
Date Received: 03/04/21 11:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	94		83 - 122	03/16/21 15:34	03/18/21 06:47	1

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0800	U	0.485	0.0800	ug/Kg		03/11/21 12:20	03/12/21 20:24	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.218	U	0.759	0.218	ug/Kg		03/16/21 13:05	04/01/21 12:18	1
Perfluorohexanesulfonic acid (PFHxS)	0.266	U	0.759	0.266	ug/Kg		03/16/21 13:05	04/01/21 12:18	1
Perfluorooctanesulfonic acid (PFOS)	0.133	U	0.759	0.133	ug/Kg		03/16/21 13:05	04/01/21 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	99		57 - 153	03/16/21 13:05	04/01/21 12:18	1
13C8 PFOS	104		70 - 130	03/16/21 13:05	04/01/21 12:18	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.723	U	1.93	0.723	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Arsenic	3.86	U	9.65	3.86	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Barium	**291**	J	19.3	4.82	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Beryllium	0.386	U	0.965	0.386	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Cadmium	0.231	U	0.482	0.231	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Chromium	4.34	U	9.65	4.34	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Iron	**2500**	J	116	57.9	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Copper	3.86	U	9.65	3.86	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Manganese	**34.9**		4.82	1.93	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Lead	**1.93**	J	2.89	1.21	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Antimony	1.93	~~U~~ UJ	4.82	1.93	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Selenium	3.09	U	4.82	3.09	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Thallium	1.93	U	4.82	1.93	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Zinc	19.3	U	48.2	19.3	mg/Kg		03/19/21 09:44	03/22/21 18:13	20
Uranium	**0.457**	J	0.965	0.386	mg/Kg		03/19/21 09:44	03/22/21 18:13	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0175~~ ~~J b~~ 0.0294 UBJ		0.0294	0.00979	mg/Kg		03/24/21 17:26	03/24/21 20:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.198	U	0.521	0.198	mg/Kg		03/11/21 09:04	03/11/21 11:08	1
pH	**8.4**	~~HF~~	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	**2.20**		1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.79**	J	9.93	4.90	mg/Kg			03/22/21 18:40	1
Nitrite as N	**1.15**	J	4.97	0.861	mg/Kg			03/22/21 18:40	1
Fluoride	**7.52**		0.497	0.332	mg/Kg			03/22/21 18:40	1
Nitrate as N	**1.77**	J	4.97	1.40	mg/Kg			03/22/21 18:40	1
Nitrate Nitrite as N	**2.92**	J	4.97	0.274	mg/Kg			03/22/21 18:40	1
Sulfate	**65.3**		9.93	3.86	mg/Kg			03/22/21 18:40	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 31-BG-S-3-4-210303
Lab Sample ID: 560-92998-3
Date Collected: 03/03/21 12:15
Matrix: Solid
Date Received: 03/04/21 11:40

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	132		10.0	10.0	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.788	Q	0.136	0.159	1.00	0.0433	pCi/g	03/11/21 17:46	04/01/21 10:14	1
Radium-228	0.0506	U	0.273	0.273		0.316	pCi/g	03/11/21 17:46	04/01/21 10:14	1
Combined Radium 226 + 228	0.838		0.305	0.316		0.316	pCi/g	03/11/21 17:46	04/01/21 10:14	1

Client Sample ID: Cell 32-BG-S-3-4-210303
Lab Sample ID: 560-92998-4
Date Collected: 03/03/21 14:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.815	U	5.58	0.815	ug/Kg			03/06/21 19:25	1
Chloromethane	1.34	U	5.58	1.34	ug/Kg			03/06/21 19:25	1
Vinyl chloride	0.670	U	5.58	0.670	ug/Kg			03/06/21 19:25	1
Bromomethane	1.23	U	5.58	1.23	ug/Kg			03/06/21 19:25	1
Trichlorofluoromethane	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
Acrolein	9.60	U	55.8	9.60	ug/Kg			03/06/21 19:25	1
1,1-Dichloroethene	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
trans-1,2-Dichloroethene	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
Methyl tert-butyl ether	0.681	U	5.58	0.681	ug/Kg			03/06/21 19:25	1
1,3-Dichlorobenzene	0.346	U	5.58	0.346	ug/Kg			03/06/21 19:25	1
Methylene Chloride	5.58	U	27.9	5.58	ug/Kg			03/06/21 19:25	1
Acrylonitrile	4.02	U	55.8	4.02	ug/Kg			03/06/21 19:25	1
cis-1,2-Dichloroethene	0.636	U	5.58	0.636	ug/Kg			03/06/21 19:25	1
Carbon tetrachloride	0.569	U	5.58	0.569	ug/Kg			03/06/21 19:25	1
Benzene	0.703	U	5.58	0.703	ug/Kg			03/06/21 19:25	1
1,2-Dichloroethane	0.580	U	5.58	0.580	ug/Kg			03/06/21 19:25	1
Trichloroethene	0.313	U	5.58	0.313	ug/Kg			03/06/21 19:25	1
1,1,1-Trichloroethane	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
1,1-Dichloroethane	0.658	U	5.58	0.658	ug/Kg			03/06/21 19:25	1
1,2-Dichloropropane	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
1,4-Dioxane	21.2	U	112	21.2	ug/Kg			03/06/21 19:25	1
Chloroform	0.971	U	5.58	0.971	ug/Kg			03/06/21 19:25	1
Bromodichloromethane	0.223	U	5.58	0.223	ug/Kg			03/06/21 19:25	1
1,1-Dichloropropene	0.580	U	5.58	0.580	ug/Kg			03/06/21 19:25	1
cis-1,3-Dichloropropene	0.502	U	5.58	0.502	ug/Kg			03/06/21 19:25	1
Toluene	1.00	U	5.58	1.00	ug/Kg			03/06/21 19:25	1
trans-1,3-Dichloropropene	0.580	U	5.58	0.580	ug/Kg			03/06/21 19:25	1
1,1,2-Trichloroethane	0.558	U	5.58	0.558	ug/Kg			03/06/21 19:25	1
Tetrachloroethene	0.826	U	5.58	0.826	ug/Kg			03/06/21 19:25	1
1,3-Dichloropropene, Total	0.580	U	5.58	0.580	ug/Kg			03/06/21 19:25	1
1,2-Dibromoethane	0.335	U	5.58	0.335	ug/Kg			03/06/21 19:25	1
Monochlorobenzene	0.335	U	5.58	0.335	ug/Kg			03/06/21 19:25	1
Ethylbenzene	0.502	U	5.58	0.502	ug/Kg			03/06/21 19:25	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 32-BG-S-3-4-210303
Lab Sample ID: 560-92998-4
Date Collected: 03/03/21 14:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.558	U	11.2	0.558	ug/Kg			03/06/21 19:25	1
Styrene	0.335	U	5.58	0.335	ug/Kg			03/06/21 19:25	1
Tribromomethane	0.569	U	5.58	0.569	ug/Kg			03/06/21 19:25	1
1,1,2,2-Tetrachloroethane	0.424	U	5.58	0.424	ug/Kg			03/06/21 19:25	1
1,4-Dichlorobenzene	0.357	U	5.58	0.357	ug/Kg			03/06/21 19:25	1
1,2-Dichlorobenzene	0.279	U	5.58	0.279	ug/Kg			03/06/21 19:25	1
1,2,4-Trichlorobenzene	1.08	U	5.58	1.08	ug/Kg			03/06/21 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*65 - 152*		*03/06/21 19:25*	*1*
Toluene-d8 (Surr)	*97*		*65 - 139*		*03/06/21 19:25*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.7	11.9	ug/Kg		03/16/21 09:20	03/17/21 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*99*		*30 - 164*	*03/16/21 09:20*	*03/17/21 19:32*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00942	U	0.302	0.00942	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Acenaphthylene	0.0751	U	0.302	0.0751	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Anthracene	0.0155	U	0.302	0.0155	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzidine	0.905	U	3.02	0.905	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzo[a]anthracene	0.0183	U	0.302	0.0183	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzo[b]fluoranthene	0.0240	U	0.302	0.0240	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzo[k]fluoranthene	0.0366	U	0.302	0.0366	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzo[g,h,i]perylene	0.0146	U	0.302	0.0146	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Benzo[a]pyrene	0.0183	U	0.302	0.0183	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Bis(2-chloroethyl)ether	0.0152	U ↘ UJ	0.302	0.0152	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Di (2-ethylhexyl)phthalate	0.0421	U	0.302	0.0421	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Chrysene	0.0247	U	0.302	0.0247	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dibenz(a,h)anthracene	0.0174	U	0.302	0.0174	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dichlorobenzidine, 3,3'-	0.0823	U	0.604	0.0823	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Diethyl phthalate	0.0238	U	0.604	0.0238	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dimethyl phthalate	0.0210	U	0.302	0.0210	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dibutylphthalate	0.0265	U	0.302	0.0265	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
2,4-Dinitrotoluene	0.0604	U	0.302	0.0604	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
2,6-Dinitrotoluene	0.0256	U	0.302	0.0256	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0201	U	0.302	0.0201	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Fluoranthene	0.0329	U	0.302	0.0329	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Fluorene	0.0165	U	0.302	0.0165	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Hexachlorobenzene	0.0265	U	0.302	0.0265	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Hexachlorobutadiene	0.00915	U ↘ UJ	0.302	0.00915	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Hexachlorocyclopentadiene	0.102	U	1.46	0.102	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Hexachloroethane	0.0195	U ↘ UJ	0.302	0.0195	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Indeno[1,2,3-cd]pyrene	0.0201	U	0.302	0.0201	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Isophorone	0.0155	U ↘ UJ	0.302	0.0155	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
1-Methylnaphthalene	0.0102	U	0.302	0.0102	mg/Kg		03/16/21 15:25	03/24/21 04:36	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 32-BG-S-3-4-210303
Lab Sample ID: 560-92998-4
Date Collected: 03/03/21 14:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.0174	U ↓ UJ	0.302	0.0174	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Naphthalene	0.0284	U * UJ	0.302	0.0284	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Nitrobenzene	0.0201	U	0.302	0.0201	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
N-Nitrosodi-n-butylamine	0.0884	U	0.302	0.0884	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
N-Nitrosodiethylamine	0.0595	U	0.302	0.0595	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
N-Nitrosodimethylamine	0.0338	U ↓ UJ	0.302	0.0338	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
N-Nitrosodiphenylamine	0.0192	U	0.302	0.0192	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
N-Nitrosopyrrolidine	0.0585	U	0.302	0.0585	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Pentachlorobenzene	0.0595	U	0.302	0.0595	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Phenanthrene	0.0155	U	0.302	0.0155	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Pyrene	0.0111	U	0.302	0.0111	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
1,2,4,5-Tetrachlorobenzene	0.0448	U ↓ UJ	0.302	0.0448	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
2,4-Dichlorophenol	0.00915	U ↓ UJ	0.302	0.00915	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dinitrophenols	0.305	U	1.46	0.305	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Dinitro-o-cresol	0.302	U	1.46	0.302	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Pentachlorophenol	0.302	U	1.46	0.302	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
2,4,6-Trichlorophenol	0.00915	U	0.302	0.00915	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
2,4,5-Trichlorophenol	0.00915	U	0.302	0.00915	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
Atrazine	0.0338	U	0.302	0.0338	mg/Kg		03/16/21 15:25	03/24/21 04:36	1
bis (2-chloroisopropyl) ether	0.0210	U	0.302	0.0210	mg/Kg		03/16/21 15:25	03/24/21 04:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*54*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*
2-Fluorobiphenyl	*58*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*
Terphenyl-d14	*73*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*
Phenol-d5 (Surr)	*57*		*46 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*
2-Fluorophenol	*54*		*43 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*
2,4,6-Tribromophenol	*57*		*35 - 120*	*03/16/21 15:25*	*03/24/21 04:36*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0647	U	0.101	0.0647	mg/Kg		03/11/21 09:04	03/11/21 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*101*		*20 - 140*	*03/11/21 09:04*	*03/11/21 16:19*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	35.4	U	51.2	35.4	mg/Kg		03/09/21 09:20	03/10/21 11:40	1
C28-C36	35.4	U	51.2	35.4	mg/Kg		03/09/21 09:20	03/10/21 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*49*		*39 - 120*	*03/09/21 09:20*	*03/10/21 11:40*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.930	U	5.11	0.930	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Hexachlorocyclohexane, gamma-	1.83	U	5.11	1.83	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Hexachlorocyclohexane, beta-	1.77	U	5.11	1.77	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Hexachlorocyclohexane, delta-	1.73	U	5.11	1.73	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Heptachlor	1.62	U	5.11	1.62	ug/Kg		03/11/21 08:26	03/15/21 19:58	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 32-BG-S-3-4-210303
Lab Sample ID: 560-92998-4
Date Collected: 03/03/21 14:40
Matrix: Solid
Date Received: 03/04/21 11:40

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	0.787	U	5.11	0.787	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Heptachlor epoxide	1.47	U	5.11	1.47	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Endosulfan I	1.23	U	5.11	1.23	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Dieldrin	1.12	U	5.11	1.12	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Endrin	1.94	U	5.11	1.94	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Endosulfan II	1.51	U	5.11	1.51	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
DDT	1.16	U	5.11	1.16	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Endrin aldehyde	1.34	U	5.11	1.34	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Endosulfan sulfate	1.31	U	5.11	1.31	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Chlordane (technical)	12.3	U	51.1	12.3	ug/Kg		03/11/21 08:26	03/15/21 19:58	1
Toxaphene	25.6	U	102	25.6	ug/Kg		03/11/21 08:26	03/15/21 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 120*	*03/11/21 08:26*	*03/15/21 19:58*	*1*
DCB Decachlorobiphenyl	*90*		*13 - 135*	*03/11/21 08:26*	*03/15/21 19:58*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1221	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1232	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1242	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1248	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1254	0.00520	U	0.0337	0.00520	mg/Kg		03/19/21 07:31	03/19/21 18:16	1
Aroclor 1260	0.0102	U	0.0337	0.0102	mg/Kg		03/19/21 07:31	03/19/21 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*32 - 132*	*03/19/21 07:31*	*03/19/21 18:16*	*1*
DCB Decachlorobiphenyl	*82*		*57 - 138*	*03/19/21 07:31*	*03/19/21 18:16*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U	0.0939	0.0213	mg/Kg		03/16/21 15:34	03/18/21 07:10	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0404	U	0.188	0.0404	mg/Kg		03/16/21 15:34	03/18/21 07:10	1
2,4,6-Trinitrotoluene	0.0288	U	0.0939	0.0288	mg/Kg		03/16/21 15:34	03/18/21 07:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*		*83 - 122*	*03/16/21 15:34*	*03/18/21 07:10*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.107**	**J**	0.471	0.0776	ug/Kg		03/11/21 12:20	03/12/21 20:44	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.214	U	0.743	0.214	ug/Kg		03/16/21 13:05	04/01/21 12:27	1
Perfluorohexanesulfonic acid (PFHxS)	0.260	U	0.743	0.260	ug/Kg		03/16/21 13:05	04/01/21 12:27	1
Perfluorooctanesulfonic acid (PFOS)	0.130	U	0.743	0.130	ug/Kg		03/16/21 13:05	04/01/21 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*99*		*57 - 153*	*03/16/21 13:05*	*04/01/21 12:27*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-92998-1
Project/Site: Chevron - Jal Land Farm Soils, 03/02/2021

Client Sample ID: Cell 32-BG-S-3-4-210303 Lab Sample ID: 560-92998-4

Date Collected: 03/03/21 14:40 **Matrix: Solid**
Date Received: 03/04/21 11:40

Method: DV-LC-0012 - Fluorinated Alkyl Substances (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	104		70 - 130	03/16/21 13:05	04/01/21 12:27	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.704	U	1.88	0.704	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Arsenic	**3.95**	**J**	9.39	3.76	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Barium	**266**	J	18.8	4.70	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Beryllium	0.376	U	0.939	0.376	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Cadmium	0.225	U	0.470	0.225	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Chromium	4.23	U	9.39	4.23	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Iron	**1970**	J	113	56.3	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Copper	3.76	U	9.39	3.76	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Manganese	**24.2**		4.70	1.88	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Lead	**1.30**	**J**	2.82	1.17	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Antimony	1.88	~~U~~ UJ	4.70	1.88	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Selenium	3.01	U	4.70	3.01	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Thallium	1.88	U	4.70	1.88	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Zinc	18.8	U	47.0	18.8	mg/Kg		03/19/21 09:44	03/22/21 18:17	20
Uranium	**0.428**	**J**	0.939	0.376	mg/Kg		03/19/21 09:44	03/22/21 18:17	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0178~~	~~J b~~ 0.0309 UBJ	0.0309	0.0103	mg/Kg		03/24/21 17:26	03/24/21 20:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.207	U	0.543	0.207	mg/Kg		03/15/21 18:53	03/15/21 21:21	1
pH	**8.3**	~~HF~~	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**25.8**		9.84	4.85	mg/Kg			03/22/21 19:02	1
~~Nitrite as N~~	~~0.853~~	~~U~~	~~4.92~~	~~0.853~~	~~mg/Kg~~			~~03/22/21 19:02~~	~~1~~ R
Fluoride	**8.30**		0.492	0.329	mg/Kg			03/22/21 19:02	1
Nitrate as N	**4.26**	**J**	4.92	1.38	mg/Kg			03/22/21 19:02	1
Nitrate Nitrite as N	**4.26**	**J**	4.92	0.272	mg/Kg			03/22/21 19:02	1
Sulfate	**125**		9.84	3.83	mg/Kg			03/22/21 19:02	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**164**		10.0	10.0	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.09**		0.214	0.242	1.00	0.146	pCi/g	03/11/21 17:46	04/01/21 10:14	1
Radium-228	0.0598	U	0.0481	0.0484		0.474	pCi/g	03/11/21 17:46	04/01/21 10:14	1
Combined Radium 226 + 228	**1.15**		0.219	0.247		0.474	pCi/g	03/11/21 17:46	04/01/21 10:14	1

Eurofins Xenco, Corpus Christi

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 93041

Address: 630 Plaza Drive Suite 100	Due Date Requested:	
City: Highlands Ranch	TAT Requested (days): Std	
State, Zip: CO, 80129-2377		
Phone: 303-710-7537(Tel)	PO #:	
Email: Alison.Schaffer@arcadis.com	WO #:	
Project Name: Chevron - Jal Land Farm Soils	Project #: 56008683	
Site: Landfarm	SSOW#:	

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_ DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
Cell 37-BG-S-3-4-210304	3/4/21	1520	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell 33-BG-S-3-4-210304	3/4/21	1215	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	

3/4/21



Loc: 560
93041

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	3/4/21 1730	Arcadis	Caitlyn [signature]	03/05/2021 1148	EX
2	[signature]					
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

3.8 IR-8 C6 3.0

Ver: 01/16/2019

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

LCMS

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: ~~Cell 37 -BG-S-3-4-210302~~ Cell 37 -BG-S-3-4-210304 **Lab Sample ID: 560-93041-1**
Date Collected: 03/04/21 15:20 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.729	U	4.99	0.729	ug/Kg			03/08/21 15:15	1
Chloromethane	1.20	U	4.99	1.20	ug/Kg			03/08/21 15:15	1
Vinyl chloride	0.599	U	4.99	0.599	ug/Kg			03/08/21 15:15	1
Bromomethane	1.10	U	4.99	1.10	ug/Kg			03/08/21 15:15	1
Trichlorofluoromethane	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
Acrolein	8.58	U	49.9	8.58	ug/Kg			03/08/21 15:15	1
1,1-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
trans-1,2-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
Methyl tert-butyl ether	0.609	U	4.99	0.609	ug/Kg			03/08/21 15:15	1
1,3-Dichlorobenzene	0.309	U	4.99	0.309	ug/Kg			03/08/21 15:15	1
Methylene Chloride	4.99	U	25.0	4.99	ug/Kg			03/08/21 15:15	1
Acrylonitrile	3.59	U	49.9	3.59	ug/Kg			03/08/21 15:15	1
cis-1,2-Dichloroethene	0.569	U	4.99	0.569	ug/Kg			03/08/21 15:15	1
Carbon tetrachloride	0.509	U	4.99	0.509	ug/Kg			03/08/21 15:15	1
Benzene	0.629	U	4.99	0.629	ug/Kg			03/08/21 15:15	1
1,2-Dichloroethane	0.519	U	4.99	0.519	ug/Kg			03/08/21 15:15	1
Trichloroethene	0.279	U	4.99	0.279	ug/Kg			03/08/21 15:15	1
1,1,1-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
1,1-Dichloroethane	0.589	U	4.99	0.589	ug/Kg			03/08/21 15:15	1
1,2-Dichloropropane	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
1,4-Dioxane	19.0	U	99.8	19.0	ug/Kg			03/08/21 15:15	1
Chloroform	0.868	U	4.99	0.868	ug/Kg			03/08/21 15:15	1
Bromodichloromethane	0.200	U	4.99	0.200	ug/Kg			03/08/21 15:15	1
1,1-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/08/21 15:15	1
cis-1,3-Dichloropropene	0.449	U	4.99	0.449	ug/Kg			03/08/21 15:15	1
Toluene	0.898	U	4.99	0.898	ug/Kg			03/08/21 15:15	1
trans-1,3-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/08/21 15:15	1
1,1,2-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/08/21 15:15	1
Tetrachloroethene	0.739	U	4.99	0.739	ug/Kg			03/08/21 15:15	1
1,3-Dichloropropene, Total	0.519	U	4.99	0.519	ug/Kg			03/08/21 15:15	1
1,2-Dibromoethane	0.299	U	4.99	0.299	ug/Kg			03/08/21 15:15	1
Monochlorobenzene	0.299	U	4.99	0.299	ug/Kg			03/08/21 15:15	1
Ethylbenzene	0.449	U	4.99	0.449	ug/Kg			03/08/21 15:15	1
Xylenes, Total	0.499	U	9.98	0.499	ug/Kg			03/08/21 15:15	1
Styrene	0.299	U	4.99	0.299	ug/Kg			03/08/21 15:15	1
Tribromomethane	0.509	U	4.99	0.509	ug/Kg			03/08/21 15:15	1
1,1,2,2-Tetrachloroethane	0.379	U	4.99	0.379	ug/Kg			03/08/21 15:15	1
1,4-Dichlorobenzene	0.319	U	4.99	0.319	ug/Kg			03/08/21 15:15	1
1,2-Dichlorobenzene	0.250	U	4.99	0.250	ug/Kg			03/08/21 15:15	1
1,2,4-Trichlorobenzene	0.968	U	4.99	0.968	ug/Kg			03/08/21 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*65 - 152*		*03/08/21 15:15*	*1*
Toluene-d8 (Surr)	*99*		*65 - 139*		*03/08/21 15:15*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	12.0	U	65.9	12.0	ug/Kg		03/16/21 09:20	03/17/21 19:56	1

Client Sample Results

Client: ARCADIS U.S., Inc.

Job ID: 560-93041-1

Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: ~~Cell 37 -BG-S-3-4-210302~~ Cell 37 -BG-S-3-4-210304

Lab Sample ID: 560-93041-1

Date Collected: 03/04/21 15:20

Matrix: Solid

Date Received: 03/05/21 11:48

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	97		30 - 164	03/16/21 09:20	03/17/21 19:56	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U H	0.330	0.0103	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Acenaphthylene	0.0821	U H *	0.330	0.0821	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Anthracene	0.0170	U H	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzidine	0.990	U H	3.30	0.990	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzo[a]anthracene	0.0200	U H	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzo[b]fluoranthene	0.0262	U H	0.330	0.0262	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzo[k]fluoranthene	0.0400	U H	0.330	0.0400	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzo[g,h,i]perylene	0.0160	U H	0.330	0.0160	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Benzo[a]pyrene	0.0200	U H	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Bis(2-chloroethyl)ether	0.0166	U H *	0.330	0.0166	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Di (2-ethylhexyl)phthalate	0.0460	U H	0.330	0.0460	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Chrysene	0.0270	U H	0.330	0.0270	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dibenz(a,h)anthracene	0.0190	U H	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dichlorobenzidine, 3,3'-	0.0900	U H	0.660	0.0900	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Diethyl phthalate	0.0260	U H *	0.660	0.0260	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dimethyl phthalate	0.0230	U H	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dibutylphthalate	0.0290	U H	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
2,4-Dinitrotoluene	0.0660	U H	0.330	0.0660	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
2,6-Dinitrotoluene	0.0280	U H *	0.330	0.0280	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U H	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Fluoranthene	0.0360	U H	0.330	0.0360	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Fluorene	0.0180	U H *	0.330	0.0180	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Hexachlorobenzene	0.0290	U H	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Hexachlorobutadiene	0.0100	U H	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Hexachlorocyclopentadiene	0.111	U H	1.60	0.111	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Hexachloroethane	0.0213	U H *	0.330	0.0213	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Indeno[1,2,3-cd]pyrene	0.0220	U H	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Isophorone	0.0170	U H	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
1-Methylnaphthalene	0.0112	U H	0.330	0.0112	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
2-Methylnaphthalene	0.0190	U H *	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Naphthalene	0.0310	U H *	0.330	0.0310	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Nitrobenzene	0.0220	U H	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
N-Nitrosodi-n-butylamine	0.0967	U H	0.330	0.0967	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
N-Nitrosodiethylamine	0.0650	U H	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
N-Nitrosodimethylamine	0.0370	U H	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
N-Nitrosodiphenylamine	0.0210	U H	0.330	0.0210	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
N-Nitrosopyrrolidine	0.0640	U H	0.330	0.0640	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Pentachlorobenzene	0.0650	U H	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Phenanthrene	0.0170	U H	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Pyrene	0.0121	U H	0.330	0.0121	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
1,2,4,5-Tetrachlorobenzene	0.0490	U H	0.330	0.0490	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
2,4-Dichlorophenol	0.0100	U H *	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dinitrophenols	0.333	U H	1.60	0.333	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Dinitro-o-cresol	0.330	U H	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Pentachlorophenol	0.330	U H	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 13:24	1

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Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: ~~Cell 37 -BG-S-3-4-210302~~ Cell 37 -BG-S-3-4-210304 **Lab Sample ID: 560-93041-1**
Date Collected: 03/04/21 15:20 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.0100	U H	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
2,4,5-Trichlorophenol	0.0100	U H	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
Atrazine	0.0370	U H	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 13:24	1
bis (2-chloroisopropyl) ether	0.0230	U H	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 13:24	1

UJ

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*55*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*
2-Fluorobiphenyl	*55*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*
Terphenyl-d14	*83*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*
Phenol-d5 (Surr)	*58*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*
2-Fluorophenol	*57*		*43 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*
2,4,6-Tribromophenol	*77*		*35 - 120*	*03/19/21 11:14*	*04/07/21 13:24*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0648	U	0.101	0.0648	mg/Kg		03/11/21 09:04	03/11/21 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*72*		*20 - 140*	*03/11/21 09:04*	*03/11/21 16:56*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.5	U	48.4	33.5	mg/Kg		03/12/21 07:33	03/16/21 18:14	1
C28-C36	33.5	U	48.4	33.5	mg/Kg		03/12/21 07:33	03/16/21 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*39 - 120*	*03/12/21 07:33*	*03/16/21 18:14*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.907	U	4.99	0.907	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Hexachlorocyclohexane, gamma-	1.78	U	4.99	1.78	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Hexachlorocyclohexane, beta-	1.72	U	4.99	1.72	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Hexachlorocyclohexane, delta-	1.68	U	4.99	1.68	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Heptachlor	1.58	U	4.99	1.58	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Aldrin	0.768	U	4.99	0.768	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Heptachlor epoxide	1.44	U	4.99	1.44	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Endosulfan I	1.20	U	4.99	1.20	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Dieldrin	1.10	U	4.99	1.10	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Endrin	1.89	U	4.99	1.89	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Endosulfan II	1.48	U	4.99	1.48	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
DDT	1.13	U	4.99	1.13	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Endrin aldehyde	1.31	U	4.99	1.31	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Endosulfan sulfate	1.28	U	4.99	1.28	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Chlordane (technical)	12.0	U	49.9	12.0	ug/Kg		03/11/21 08:26	03/15/21 20:10	1
Toxaphene	24.9	U	99.7	24.9	ug/Kg		03/11/21 08:26	03/15/21 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*30 - 120*	*03/11/21 08:26*	*03/15/21 20:10*	*1*
DCB Decachlorobiphenyl	*85*		*13 - 135*	*03/11/21 08:26*	*03/15/21 20:10*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: ~~Cell 37 -BG-S-3-4-210302~~ Cell 37 -BG-S-3-4-210304
Lab Sample ID: 560-93041-1
Date Collected: 03/04/21 15:20
Matrix: Solid
Date Received: 03/05/21 11:48

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1221	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1232	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1242	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1248	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1254	0.00513	U	0.0332	0.00513	mg/Kg		03/19/21 07:31	03/19/21 18:40	1
Aroclor 1260	0.0101	U	0.0332	0.0101	mg/Kg		03/19/21 07:31	03/19/21 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*32 - 132*	*03/19/21 07:31*	*03/19/21 18:40*	*1*
DCB Decachlorobiphenyl	*75*		*57 - 138*	*03/19/21 07:31*	*03/19/21 18:40*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0207	U	0.0912	0.0207	mg/Kg		03/16/21 15:34	03/18/21 08:19	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0392	U	0.182	0.0392	mg/Kg		03/16/21 15:34	03/18/21 08:19	1
2,4,6-Trinitrotoluene	0.0280	U	0.0912	0.0280	mg/Kg		03/16/21 15:34	03/18/21 08:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*		*83 - 122*	*03/16/21 15:34*	*03/18/21 08:19*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0822	U	0.499	0.0822	ug/Kg		03/11/21 12:20	03/12/21 21:09	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.218	U	0.759	0.218	ug/Kg		03/16/21 13:05	04/01/21 12:44	1
Perfluorohexanesulfonic acid (PFHxS)	0.266	U	0.759	0.266	ug/Kg		03/16/21 13:05	04/01/21 12:44	1
Perfluorooctanesulfonic acid (PFOS)	0.133	U	0.759	0.133	ug/Kg		03/16/21 13:05	04/01/21 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*99*		*57 - 153*	*03/16/21 13:05*	*04/01/21 12:44*	*1*
13C8 PFOS	*105*		*70 - 130*	*03/16/21 13:05*	*04/01/21 12:44*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0642	U	0.171	0.0642	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Arsenic	**2.08**		0.856	0.342	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Barium	**37.4**		1.71	0.428	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Beryllium	**0.319**		0.0856	0.0342	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Cadmium	**0.0289**	**J**	0.0428	0.0205	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Chromium	**5.08**		0.856	0.385	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Iron	**5330**		10.3	5.13	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Copper	**1.97**		0.856	0.342	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Manganese	**38.8**		0.428	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Lead	**4.50**		0.257	0.107	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Antimony	0.171	U	0.428	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Selenium	**0.279**	**J**	0.428	0.274	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Thallium	0.171	U	0.428	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:22	2

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: ~~Cell 37 -BG-S-3-4-210302~~ Cell 37 -BG-S-3-4-210304 **Lab Sample ID: 560-93041-1**
Date Collected: 03/04/21 15:20 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	9.72		4.28	1.71	mg/Kg		03/11/21 10:09	03/17/21 18:22	2
Uranium	0.126		0.0856	0.0342	mg/Kg		03/11/21 10:09	03/17/21 18:22	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0228~~ ~~J b~~ 0.0303 UBJ		0.0303	0.0101	mg/Kg		03/24/21 17:28	03/24/21 21:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.216	U	0.568	0.216	mg/Kg		03/15/21 18:53	03/15/21 21:31	1
pH	8.2	~~HF~~	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	0.338	U	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.82	U	9.78	4.82	mg/Kg			03/18/21 17:24	1
Nitrite as N	~~3.28~~ ~~J b~~ 4.89 UBJ		4.89	0.848	mg/Kg			03/18/21 17:24	1
Fluoride	2.98		0.489	0.326	mg/Kg			03/18/21 17:24	1
~~Nitrate as N~~	~~1.38~~ ~~U~~		~~4.89~~	~~1.38~~	~~mg/Kg~~			~~03/18/21 17:24~~	~~1~~ R
Nitrate Nitrite as N	~~3.28~~ ~~J b~~ 4.89 UB		4.89	0.270	mg/Kg			03/18/21 17:24	1
Sulfate	18.0		9.78	3.80	mg/Kg			03/18/21 17:24	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		12.5	12.5	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.366	Q	0.135	0.141	1.00	0.126	pCi/g	03/12/21 13:14	04/02/21 06:39	1
Radium-228	0.305		0.244	0.246		0.290	pCi/g	03/12/21 13:14	04/02/21 06:39	1
Combined Radium 226 + 228	0.671		0.279	0.284		0.290	pCi/g	03/12/21 13:14	04/02/21 06:39	1

Client Sample ID: ~~Cell 33 -BG-S-3-4-210302~~ Cell 33 -BG-S-3-4-210304 **Lab Sample ID: 560-93041-2**
Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.726	U	4.97	0.726	ug/Kg			03/08/21 14:50	1
Chloromethane	1.19	U	4.97	1.19	ug/Kg			03/08/21 14:50	1
Vinyl chloride	0.596	U	4.97	0.596	ug/Kg			03/08/21 14:50	1
Bromomethane	1.09	U	4.97	1.09	ug/Kg			03/08/21 14:50	1
Trichlorofluoromethane	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
Acrolein	8.55	U	49.7	8.55	ug/Kg			03/08/21 14:50	1
1,1-Dichloroethene	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
trans-1,2-Dichloroethene	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
Methyl tert-butyl ether	0.606	U	4.97	0.606	ug/Kg			03/08/21 14:50	1
1,3-Dichlorobenzene	0.308	U	4.97	0.308	ug/Kg			03/08/21 14:50	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: ~~Cell 33 -BG-S-3-4-210302~~ Cell 33 -BG-S-3-4-210304 **Lab Sample ID: 560-93041-2**
Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	4.97	U	24.9	4.97	ug/Kg			03/08/21 14:50	1
Acrylonitrile	3.58	U	49.7	3.58	ug/Kg			03/08/21 14:50	1
cis-1,2-Dichloroethene	0.567	U	4.97	0.567	ug/Kg			03/08/21 14:50	1
Carbon tetrachloride	0.507	U	4.97	0.507	ug/Kg			03/08/21 14:50	1
Benzene	0.626	U	4.97	0.626	ug/Kg			03/08/21 14:50	1
1,2-Dichloroethane	0.517	U	4.97	0.517	ug/Kg			03/08/21 14:50	1
Trichloroethene	0.278	U	4.97	0.278	ug/Kg			03/08/21 14:50	1
1,1,1-Trichloroethane	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
1,1-Dichloroethane	0.586	U	4.97	0.586	ug/Kg			03/08/21 14:50	1
1,2-Dichloropropane	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
1,4-Dioxane	18.9	U	99.4	18.9	ug/Kg			03/08/21 14:50	1
Chloroform	0.865	U	4.97	0.865	ug/Kg			03/08/21 14:50	1
Bromodichloromethane	0.199	U	4.97	0.199	ug/Kg			03/08/21 14:50	1
1,1-Dichloropropene	0.517	U	4.97	0.517	ug/Kg			03/08/21 14:50	1
cis-1,3-Dichloropropene	0.447	U	4.97	0.447	ug/Kg			03/08/21 14:50	1
Toluene	0.895	U	4.97	0.895	ug/Kg			03/08/21 14:50	1
trans-1,3-Dichloropropene	0.517	U	4.97	0.517	ug/Kg			03/08/21 14:50	1
1,1,2-Trichloroethane	0.497	U	4.97	0.497	ug/Kg			03/08/21 14:50	1
Tetrachloroethene	0.736	U	4.97	0.736	ug/Kg			03/08/21 14:50	1
1,3-Dichloropropene, Total	0.517	U	4.97	0.517	ug/Kg			03/08/21 14:50	1
1,2-Dibromoethane	0.298	U	4.97	0.298	ug/Kg			03/08/21 14:50	1
Monochlorobenzene	0.298	U	4.97	0.298	ug/Kg			03/08/21 14:50	1
Ethylbenzene	0.447	U	4.97	0.447	ug/Kg			03/08/21 14:50	1
Xylenes, Total	0.497	U	9.94	0.497	ug/Kg			03/08/21 14:50	1
Styrene	0.298	U	4.97	0.298	ug/Kg			03/08/21 14:50	1
Tribromomethane	0.507	U	4.97	0.507	ug/Kg			03/08/21 14:50	1
1,1,2,2-Tetrachloroethane	0.378	U	4.97	0.378	ug/Kg			03/08/21 14:50	1
1,4-Dichlorobenzene	0.318	U	4.97	0.318	ug/Kg			03/08/21 14:50	1
1,2-Dichlorobenzene	0.249	U	4.97	0.249	ug/Kg			03/08/21 14:50	1
1,2,4-Trichlorobenzene	0.964	U	4.97	0.964	ug/Kg			03/08/21 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*65 - 152*		*03/08/21 14:50*	*1*
Toluene-d8 (Surr)	*100*		*65 - 139*		*03/08/21 14:50*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.6	11.9	ug/Kg		03/16/21 09:20	03/17/21 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*98*		*30 - 164*	*03/16/21 09:20*	*03/17/21 20:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U H	0.329	0.0103	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Acenaphthylene	0.0818	U H *	0.329	0.0818	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Anthracene	0.0169	U H	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Benzidine	0.987	U H	3.29	0.987	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Benzo[a]anthracene	0.0199	U H	0.329	0.0199	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Benzo[b]fluoranthene	0.0261	U H	0.329	0.0261	mg/Kg		03/19/21 11:14	04/07/21 13:51	1

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Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: ~~Cell 33 -BG-S-3-4-210302~~ Cell 33 -BG-S-3-4-210304 **Lab Sample ID: 560-93041-2**
Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.0399	U H	0.329	0.0399	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Benzo[g,h,i]perylene	0.0159	U H	0.329	0.0159	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Benzo[a]pyrene	0.0199	U H	0.329	0.0199	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Bis(2-chloroethyl)ether	0.0165	U H *	0.329	0.0165	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Di (2-ethylhexyl)phthalate	0.0458	U H	0.329	0.0458	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Chrysene	0.0269	U H	0.329	0.0269	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dibenz(a,h)anthracene	0.0189	U H	0.329	0.0189	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dichlorobenzidine, 3,3'-	0.0897	U H	0.658	0.0897	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Diethyl phthalate	0.0259	U H *	0.658	0.0259	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dimethyl phthalate	0.0229	U H	0.329	0.0229	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dibutylphthalate	0.0289	U H	0.329	0.0289	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2,4-Dinitrotoluene	0.0658	U H	0.329	0.0658	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2,6-Dinitrotoluene	0.0279	U H *	0.329	0.0279	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0219	U H	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Fluoranthene	0.0359	U H	0.329	0.0359	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Fluorene	0.0179	U H *	0.329	0.0179	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Hexachlorobenzene	0.0289	U H	0.329	0.0289	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Hexachlorobutadiene	0.00997	U H	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Hexachlorocyclopentadiene	0.111	U H	1.59	0.111	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Hexachloroethane	0.0212	U H *	0.329	0.0212	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Indeno[1,2,3-cd]pyrene	0.0219	U H	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Isophorone	0.0169	U H	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
1-Methylnaphthalene	0.0112	U H	0.329	0.0112	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2-Methylnaphthalene	0.0189	U H *	0.329	0.0189	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Naphthalene	0.0309	U H *	0.329	0.0309	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Nitrobenzene	0.0219	U H	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
N-Nitrosodi-n-butylamine	0.0964	U H	0.329	0.0964	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
N-Nitrosodiethylamine	0.0648	U H	0.329	0.0648	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
N-Nitrosodimethylamine	0.0369	U H	0.329	0.0369	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
N-Nitrosodiphenylamine	0.0209	U H	0.329	0.0209	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
N-Nitrosopyrrolidine	0.0638	U H	0.329	0.0638	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Pentachlorobenzene	0.0648	U H	0.329	0.0648	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Phenanthrene	0.0169	U H	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Pyrene	0.0121	U H	0.329	0.0121	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
1,2,4,5-Tetrachlorobenzene	0.0488	U H	0.329	0.0488	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2,4-Dichlorophenol	0.00997	U H *	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dinitrophenols	0.332	U H	1.59	0.332	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Dinitro-o-cresol	0.329	U H	1.59	0.329	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Pentachlorophenol	0.329	U H	1.59	0.329	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2,4,6-Trichlorophenol	0.00997	U H	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
2,4,5-Trichlorophenol	0.00997	U H	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
Atrazine	0.0369	U H	0.329	0.0369	mg/Kg		03/19/21 11:14	04/07/21 13:51	1
bis (2-chloroisopropyl) ether	0.0229	U H	0.329	0.0229	mg/Kg		03/19/21 11:14	04/07/21 13:51	1

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Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*48*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:51*	*1*
2-Fluorobiphenyl	*52*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:51*	*1*
Terphenyl-d14	*79*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:51*	*1*
Phenol-d5 (Surr)	*51*		*46 - 120*	*03/19/21 11:14*	*04/07/21 13:51*	*1*

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Released to Imaging: 5/27/2022 3:16:29 PM

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: ~~Cell 33 -BG-S-3-4-210302~~ Cell 33 -BG-S-3-4-210304 **Lab Sample ID: 560-93041-2**
Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*51*		*43 - 120*	*03/19/21 11:14*	*04/07/21 13:51*	*1*
2,4,6-Tribromophenol	*74*		*35 - 120*	*03/19/21 11:14*	*04/07/21 13:51*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0634	U	0.0988	0.0634	mg/Kg		03/11/21 09:04	03/11/21 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*97*		*20 - 140*	*03/11/21 09:04*	*03/11/21 17:32*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.9	U	49.1	33.9	mg/Kg		03/12/21 07:33	03/16/21 18:41	1
C28-C36	33.9	U	49.1	33.9	mg/Kg		03/12/21 07:33	03/16/21 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*82*		*39 - 120*	*03/12/21 07:33*	*03/16/21 18:41*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.928	U	5.10	0.928	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Hexachlorocyclohexane, gamma-	1.82	U	5.10	1.82	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Hexachlorocyclohexane, beta-	1.76	U	5.10	1.76	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Hexachlorocyclohexane, delta-	1.72	U	5.10	1.72	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Heptachlor	1.61	U	5.10	1.61	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Aldrin	0.785	U	5.10	0.785	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Heptachlor epoxide	1.47	U	5.10	1.47	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Endosulfan I	1.22	U	5.10	1.22	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Dieldrin	1.12	U	5.10	1.12	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Endrin	1.94	U	5.10	1.94	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Endosulfan II	1.51	U	5.10	1.51	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
DDT	1.15	U	5.10	1.15	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Endrin aldehyde	1.34	U	5.10	1.34	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Endosulfan sulfate	1.30	U	5.10	1.30	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Chlordane (technical)	12.2	U	51.0	12.2	ug/Kg		03/11/21 08:26	03/15/21 20:23	1
Toxaphene	25.5	U	102	25.5	ug/Kg		03/11/21 08:26	03/15/21 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*30 - 120*	*03/11/21 08:26*	*03/15/21 20:23*	*1*
DCB Decachlorobiphenyl	*83*		*13 - 135*	*03/11/21 08:26*	*03/15/21 20:23*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1221	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1232	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1242	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1248	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1254	0.00500	U	0.0323	0.00500	mg/Kg		03/19/21 07:31	03/19/21 19:00	1
Aroclor 1260	0.00980	U	0.0323	0.00980	mg/Kg		03/19/21 07:31	03/19/21 19:00	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: ~~Cell 33 -BG-S-3-4-210302~~ Cell 33 -BG-S-3-4-210304 **Lab Sample ID: 560-93041-2**
Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*94*		*32 - 132*	*03/19/21 07:31*	*03/19/21 19:00*	*1*
DCB Decachlorobiphenyl	*85*		*57 - 138*	*03/19/21 07:31*	*03/19/21 19:00*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0209	U	0.0923	0.0209	mg/Kg		03/16/21 15:34	03/18/21 08:42	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0397	U	0.185	0.0397	mg/Kg		03/16/21 15:34	03/18/21 08:42	1
2,4,6-Trinitrotoluene	0.0283	U	0.0923	0.0283	mg/Kg		03/16/21 15:34	03/18/21 08:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 08:42*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.0800	U	0.485	0.0800	ug/Kg		03/11/21 12:20	03/12/21 21:15	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.216	U	0.753	0.216	ug/Kg		03/16/21 13:05	04/01/21 12:53	1
Perfluorohexanesulfonic acid (PFHxS)	0.263	U	0.753	0.263	ug/Kg		03/16/21 13:05	04/01/21 12:53	1
Perfluorooctanesulfonic acid (PFOS)	0.132	U	0.753	0.132	ug/Kg		03/16/21 13:05	04/01/21 12:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 12:53*	*1*
13C8 PFOS	*106*		*70 - 130*	*03/16/21 13:05*	*04/01/21 12:53*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0720	U	0.192	0.0720	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Arsenic	**1.98**		0.960	0.384	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Barium	**46.2**		1.92	0.480	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Beryllium	**0.298**		0.0960	0.0384	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Cadmium	**0.0392**	**J**	0.0480	0.0230	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Chromium	**4.93**		0.960	0.432	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Iron	**4900**		11.5	5.76	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Copper	**1.86**		0.960	0.384	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Manganese	**39.2**		0.480	0.192	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Lead	**4.20**		0.288	0.120	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Antimony	0.192	U	0.480	0.192	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Selenium	0.307	U	0.480	0.307	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Thallium	0.192	U	0.480	0.192	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Zinc	**8.67**		4.80	1.92	mg/Kg		03/11/21 10:09	03/17/21 18:25	2
Uranium	**0.156**		0.0960	0.0384	mg/Kg		03/11/21 10:09	03/17/21 18:25	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0237~~ ~~J b~~ 0.0310 UBJ		0.0310	0.0103	mg/Kg		03/24/21 17:28	03/24/21 21:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.207	U	0.543	0.207	mg/Kg		03/15/21 18:53	03/15/21 21:33	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93041-1
Project/Site: Chevron - Jal Land Farm Soils, 03/04/2021

Client Sample ID: ~~Cell 33 -BG-S-3-4-210302~~ Cell 33 -BG-S-3-4-210304 **Lab Sample ID: 560-93041-2**
Date Collected: 03/04/21 12:15 **Matrix: Solid**
Date Received: 03/05/21 11:48

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2	~~HF~~	0.1	0.1	SU			03/09/21 13:55	1
Phenols, Total	0.429	J	1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:18	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.94	J	9.91	4.89	mg/Kg			03/18/21 17:46	1
Nitrite as N	~~1.39~~	~~J b~~ 4.96 UBJ	4.96	0.859	mg/Kg			03/18/21 17:46	1
Fluoride	3.57		0.496	0.331	mg/Kg			03/18/21 17:46	1
Nitrate as N	2.16	J	4.96	1.39	mg/Kg			03/18/21 17:46	1
Nitrate Nitrite as N	~~3.55~~	~~J b~~ 4.96 UB	4.96	0.274	mg/Kg			03/18/21 17:46	1
Sulfate	23.6		9.91	3.86	mg/Kg			03/18/21 17:46	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	270		10.0	10.0	mg/L			03/16/21 14:30	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.297	Q	0.140	0.144	1.00	0.165	pCi/g	03/12/21 13:14	04/02/21 06:42	1
Radium-228	0.324	U	0.284	0.285		0.365	pCi/g	03/12/21 13:14	04/02/21 06:42	1
Combined Radium 226 + 228	0.621		0.317	0.319		0.365	pCi/g	03/12/21 13:14	04/02/21 06:42	1

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 560
93104

eurofins | Environment Testing America

Client Information	Sampler: J. Skinmann	Lab PM: Kudchadkar, Sachin G	Carrie	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 93104
Address: 630 Plaza Drive Suite 100	Due Date Requested:			
City: Highlands Ranch	TAT Requested (days): Std			
State, Zip: CO, 80129-2377	PO #:			
Phone: 303-710-7537(Tel)	WO #:			
Email: Alison.Schaffer@arcadis.com				
Project Name: Chevron - Jal Land Farm Soils	Project #: 56008683			
Site: Landfarm	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_ DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
Cell38-BG-S-3-4-210305	3/5/21	1350	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell34-BG-S-3-4-210305	3/5/21	1110	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank	—	—	—	Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	

gs 3/05/21

560-93104 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed
☐ Return To Client ☐ Disposal E

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	3/05/20 1700	Arcadis	Received by:	03/09/21 1218	Eurofins
Relinquished by:			Received by:		
Relinquished by:			Received by:		

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: Temp = -0.4 / corrected = -0.8 IR-1

Ver: 01/16/2019

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

LCMS

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305 Lab Sample ID: 560-93104-1

Date Collected: 03/05/21 13:50 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.716	U	4.90	0.716	ug/Kg			03/10/21 13:37	1
Chloromethane	1.18	U	4.90	1.18	ug/Kg			03/10/21 13:37	1
Vinyl chloride	0.588	U	4.90	0.588	ug/Kg			03/10/21 13:37	1
Bromomethane	1.08	U	4.90	1.08	ug/Kg			03/10/21 13:37	1
Trichlorofluoromethane	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
Acrolein	8.43	U	49.0	8.43	ug/Kg			03/10/21 13:37	1
1,1-Dichloroethene	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
trans-1,2-Dichloroethene	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
Methyl tert-butyl ether	0.598	U	4.90	0.598	ug/Kg			03/10/21 13:37	1
1,3-Dichlorobenzene	0.304	U	4.90	0.304	ug/Kg			03/10/21 13:37	1
Methylene Chloride	4.90	U	24.5	4.90	ug/Kg			03/10/21 13:37	1
Acrylonitrile	3.53	U	49.0	3.53	ug/Kg			03/10/21 13:37	1
cis-1,2-Dichloroethene	0.559	U	4.90	0.559	ug/Kg			03/10/21 13:37	1
Carbon tetrachloride	0.500	U	4.90	0.500	ug/Kg			03/10/21 13:37	1
Benzene	0.618	U	4.90	0.618	ug/Kg			03/10/21 13:37	1
1,2-Dichloroethane	0.510	U	4.90	0.510	ug/Kg			03/10/21 13:37	1
Trichloroethene	0.275	U	4.90	0.275	ug/Kg			03/10/21 13:37	1
1,1,1-Trichloroethane	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
1,1-Dichloroethane	0.578	U	4.90	0.578	ug/Kg			03/10/21 13:37	1
1,2-Dichloropropane	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
1,4-Dioxane	18.6	U	98.0	18.6	ug/Kg			03/10/21 13:37	1
Chloroform	0.853	U	4.90	0.853	ug/Kg			03/10/21 13:37	1
Bromodichloromethane	0.196	U	4.90	0.196	ug/Kg			03/10/21 13:37	1
1,1-Dichloropropene	0.510	U	4.90	0.510	ug/Kg			03/10/21 13:37	1
cis-1,3-Dichloropropene	0.441	U	4.90	0.441	ug/Kg			03/10/21 13:37	1
Toluene	0.882	U	4.90	0.882	ug/Kg			03/10/21 13:37	1
trans-1,3-Dichloropropene	0.510	U	4.90	0.510	ug/Kg			03/10/21 13:37	1
1,1,2-Trichloroethane	0.490	U	4.90	0.490	ug/Kg			03/10/21 13:37	1
Tetrachloroethene	0.725	U	4.90	0.725	ug/Kg			03/10/21 13:37	1
1,3-Dichloropropene, Total	0.510	U	4.90	0.510	ug/Kg			03/10/21 13:37	1
1,2-Dibromoethane	0.294	U	4.90	0.294	ug/Kg			03/10/21 13:37	1
Monochlorobenzene	0.294	U	4.90	0.294	ug/Kg			03/10/21 13:37	1
Ethylbenzene	0.441	U	4.90	0.441	ug/Kg			03/10/21 13:37	1
Xylenes, Total	0.490	U	9.80	0.490	ug/Kg			03/10/21 13:37	1
Styrene	0.294	U	4.90	0.294	ug/Kg			03/10/21 13:37	1
Tribromomethane	0.500	U	4.90	0.500	ug/Kg			03/10/21 13:37	1
1,1,2,2-Tetrachloroethane	0.373	U	4.90	0.373	ug/Kg			03/10/21 13:37	1
1,4-Dichlorobenzene	0.314	U	4.90	0.314	ug/Kg			03/10/21 13:37	1
1,2-Dichlorobenzene	0.245	U	4.90	0.245	ug/Kg			03/10/21 13:37	1
1,2,4-Trichlorobenzene	0.951	U	4.90	0.951	ug/Kg			03/10/21 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*65 - 152*		*03/10/21 13:37*	*1*
Toluene-d8 (Surr)	*101*		*65 - 139*		*03/10/21 13:37*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.8	U	65.0	11.8	ug/Kg		03/16/21 09:20	03/17/21 20:46	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305
Lab Sample ID: 560-93104-1
Date Collected: 03/05/21 13:50
Matrix: Solid
Date Received: 03/09/21 12:18

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	90		30 - 164	03/16/21 09:20	03/17/21 20:46	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U UJ	0.330	0.0103	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Acenaphthylene	0.0821	U UJ	0.330	0.0821	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Anthracene	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzidine	0.990	U	3.30	0.990	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzo[a]anthracene	0.0200	U	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzo[b]fluoranthene	0.0262	U	0.330	0.0262	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzo[k]fluoranthene	0.0400	U	0.330	0.0400	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzo[g,h,i]perylene	0.0160	U	0.330	0.0160	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Benzo[a]pyrene	0.0200	U	0.330	0.0200	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Bis(2-chloroethyl)ether	0.0166	U UJ	0.330	0.0166	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Di (2-ethylhexyl)phthalate	0.0460	U	0.330	0.0460	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Chrysene	0.0270	U	0.330	0.0270	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dibenz(a,h)anthracene	0.0190	U	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dichlorobenzidine, 3,3'-	0.0900	U	0.660	0.0900	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Diethyl phthalate	0.0260	U UJ	0.660	0.0260	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dimethyl phthalate	0.0230	U UJ	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dibutylphthalate	0.0290	U	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
2,4-Dinitrotoluene	0.0660	U	0.330	0.0660	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
2,6-Dinitrotoluene	0.0280	U UJ	0.330	0.0280	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Fluoranthene	0.0360	U	0.330	0.0360	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Fluorene	0.0180	U UJ	0.330	0.0180	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Hexachlorobenzene	0.0290	U	0.330	0.0290	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Hexachlorobutadiene	0.0100	U UJ	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Hexachlorocyclopentadiene	0.111	U	1.60	0.111	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Hexachloroethane	0.0213	U UJ	0.330	0.0213	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Indeno[1,2,3-cd]pyrene	0.0220	U	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Isophorone	0.0170	U UJ	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
1-Methylnaphthalene	0.0112	U UJ	0.330	0.0112	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
2-Methylnaphthalene	0.0190	U UJ	0.330	0.0190	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Naphthalene	0.0310	U UJ	0.330	0.0310	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Nitrobenzene	0.0220	U UJ	0.330	0.0220	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
N-Nitrosodi-n-butylamine	0.0967	U	0.330	0.0967	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
N-Nitrosodiethylamine	0.0650	U	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
N-Nitrosodimethylamine	0.0370	U UJ	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
N-Nitrosodiphenylamine	0.0210	U	0.330	0.0210	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
N-Nitrosopyrrolidine	0.0640	U	0.330	0.0640	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Pentachlorobenzene	0.0650	U	0.330	0.0650	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Phenanthrene	0.0170	U	0.330	0.0170	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Pyrene	0.0121	U	0.330	0.0121	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
1,2,4,5-Tetrachlorobenzene	0.0490	U UJ	0.330	0.0490	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
2,4-Dichlorophenol	0.0100	U UJ	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dinitrophenols	0.333	U UJ	1.60	0.333	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Dinitro-o-cresol	0.330	U UJ	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Pentachlorophenol	0.330	U	1.60	0.330	mg/Kg		03/19/21 11:14	04/07/21 14:17	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305 Lab Sample ID: 560-93104-1

Date Collected: 03/05/21 13:50 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.0100	~~U~~ UJ	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
2,4,5-Trichlorophenol	0.0100	~~U~~ UJ	0.330	0.0100	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
Atrazine	0.0370	U	0.330	0.0370	mg/Kg		03/19/21 11:14	04/07/21 14:17	1
bis (2-chloroisopropyl) ether	0.0230	~~U~~ UJ	0.330	0.0230	mg/Kg		03/19/21 11:14	04/07/21 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*48*		*46 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*
2-Fluorobiphenyl	*52*		*46 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*
Terphenyl-d14	*77*		*46 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*
Phenol-d5 (Surr)	*51*		*46 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*
2-Fluorophenol	*51*		*43 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*
2,4,6-Tribromophenol	*72*		*35 - 120*	*03/19/21 11:14*	*04/07/21 14:17*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0647	U	0.101	0.0647	mg/Kg		03/11/21 09:04	03/11/21 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*76*		*20 - 140*	*03/11/21 09:04*	*03/11/21 19:21*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	33.2	U	47.9	33.2	mg/Kg		03/12/21 07:33	03/16/21 18:41	1
C28-C36	33.2	U	47.9	33.2	mg/Kg		03/12/21 07:33	03/16/21 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*87*		*39 - 120*	*03/12/21 07:33*	*03/16/21 18:41*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.935	U	5.14	0.935	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Hexachlorocyclohexane, gamma-	1.84	U	5.14	1.84	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Hexachlorocyclohexane, beta-	1.78	U	5.14	1.78	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Hexachlorocyclohexane, delta-	1.74	U	5.14	1.74	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Heptachlor	1.62	U	5.14	1.62	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Aldrin	0.791	U	5.14	0.791	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Heptachlor epoxide	1.48	U	5.14	1.48	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Endosulfan I	1.23	U	5.14	1.23	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Dieldrin	1.13	U	5.14	1.13	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Endrin	1.95	U	5.14	1.95	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Endosulfan II	1.52	U	5.14	1.52	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
DDT	1.16	U	5.14	1.16	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Endrin aldehyde	1.35	U	5.14	1.35	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Endosulfan sulfate	1.32	U	5.14	1.32	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Chlordane (technical)	12.3	U	51.4	12.3	ug/Kg		03/11/21 08:26	03/15/21 20:36	1
Toxaphene	25.7	U	103	25.7	ug/Kg		03/11/21 08:26	03/15/21 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 120*	*03/11/21 08:26*	*03/15/21 20:36*	*1*
DCB Decachlorobiphenyl	*83*		*13 - 135*	*03/11/21 08:26*	*03/15/21 20:36*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305
Lab Sample ID: 560-93104-1
Date Collected: 03/05/21 13:50
Matrix: Solid
Date Received: 03/09/21 12:18

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1221	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1232	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1242	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1248	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1254	0.00481	U	0.0311	0.00481	mg/Kg		03/19/21 07:31	03/19/21 19:24	1
Aroclor 1260	0.00943	U	0.0311	0.00943	mg/Kg		03/19/21 07:31	03/19/21 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*32 - 132*	*03/19/21 07:31*	*03/19/21 19:24*	*1*
DCB Decachlorobiphenyl	*61*		*57 - 138*	*03/19/21 07:31*	*03/19/21 19:24*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0221	U	0.0973	0.0221	mg/Kg		03/16/21 15:34	03/18/21 09:28	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0418	U	0.195	0.0418	mg/Kg		03/16/21 15:34	03/18/21 09:28	1
2,4,6-Trinitrotoluene	0.0299	U	0.0973	0.0299	mg/Kg		03/16/21 15:34	03/18/21 09:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 09:28*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.219**	**J**	0.481	0.0793	ug/Kg		03/11/21 12:20	03/12/21 20:49	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.221	U	0.768	0.221	ug/Kg		03/16/21 13:05	04/01/21 13:02	1
Perfluorohexanesulfonic acid (PFHxS)	0.269	U	0.768	0.269	ug/Kg		03/16/21 13:05	04/01/21 13:02	1
Perfluorooctanesulfonic acid (PFOS)	0.134	U	0.768	0.134	ug/Kg		03/16/21 13:05	04/01/21 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:02*	*1*
13C8 PFOS	*106*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:02*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.166	U	0.442	0.166	mg/Kg		03/11/21 10:09	03/19/21 16:25	5
Arsenic	**2.58**		0.884	0.354	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Barium	**102**		4.42	1.11	mg/Kg		03/11/21 10:09	03/19/21 16:25	5
Beryllium	**0.318**		0.0884	0.0354	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Cadmium	0.0531	U	0.111	0.0531	mg/Kg		03/11/21 10:09	03/19/21 16:25	5
Chromium	**4.94**		2.21	0.995	mg/Kg		03/11/21 10:09	03/19/21 16:25	5
Iron	**5310**		10.6	5.31	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Copper	**2.17**		0.884	0.354	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Manganese	**47.0**		0.442	0.177	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Lead	**4.08**		0.265	0.111	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Antimony	0.442	~~U~~ UJ	1.11	0.442	mg/Kg		03/11/21 10:09	03/19/21 16:25	5
Selenium	0.283	U	0.442	0.283	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Thallium	0.177	U	0.442	0.177	mg/Kg		03/11/21 10:09	03/17/21 17:44	2

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 38 -BG-S-3-4-210305 Lab Sample ID: 560-93104-1

Date Collected: 03/05/21 13:50 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	9.82		4.42	1.77	mg/Kg		03/11/21 10:09	03/17/21 17:44	2
Uranium	0.197		0.0884	0.0354	mg/Kg		03/11/21 10:09	03/17/21 17:44	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0171~~ ~~J b~~ 0.0297 UBJ		0.0297	0.00989	mg/Kg		03/24/21 17:26	03/24/21 20:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.176	U	0.463	0.176	mg/Kg		03/11/21 09:04	03/11/21 11:10	1
pH	7.7	~~HF~~ J	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	2.40		1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:19	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.6		9.97	4.92	mg/Kg			03/18/21 12:42	1
~~Nitrite as N~~	~~0.864~~	~~U~~	~~4.99~~	~~0.864~~	~~mg/Kg~~			~~03/18/21 12:42~~	~~1~~ R
Fluoride	4.29		0.499	0.333	mg/Kg			03/18/21 12:42	1
Nitrate as N	2.50	J	4.99	1.40	mg/Kg			03/18/21 12:42	1
Nitrate Nitrite as N	~~2.50~~ ~~J b~~ 4.99 UB		4.99	0.275	mg/Kg			03/18/21 12:42	1
Sulfate	85.3		9.97	3.88	mg/Kg			03/18/21 12:42	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180	H	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.447	Q	0.108	0.118	1.00	0.0616	pCi/g	03/16/21 15:31	04/06/21 07:57	1
Radium-228	0.522		0.157	0.166		0.0886	pCi/g	03/16/21 15:31	04/06/21 07:57	1
Combined Radium 226 + 228	0.969		0.191	0.204		0.0886	pCi/g	03/16/21 15:31	04/06/21 07:57	1

Client Sample ID: Cell 34 -BG-S-3-4-210305 Lab Sample ID: 560-93104-2

Date Collected: 03/05/21 11:10 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.731	U	5.01	0.731	ug/Kg			03/10/21 23:39	1
Chloromethane	1.20	U	5.01	1.20	ug/Kg			03/10/21 23:39	1
Vinyl chloride	0.601	U	5.01	0.601	ug/Kg			03/10/21 23:39	1
Bromomethane	1.10	U	5.01	1.10	ug/Kg			03/10/21 23:39	1
Trichlorofluoromethane	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
Acrolein	8.62	U	50.1	8.62	ug/Kg			03/10/21 23:39	1
1,1-Dichloroethene	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
trans-1,2-Dichloroethene	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
Methyl tert-butyl ether	0.611	U	5.01	0.611	ug/Kg			03/10/21 23:39	1
1,3-Dichlorobenzene	0.311	U	5.01	0.311	ug/Kg			03/10/21 23:39	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 34 -BG-S-3-4-210305
Lab Sample ID: 560-93104-2
Date Collected: 03/05/21 11:10
Matrix: Solid
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	5.01	U	25.1	5.01	ug/Kg			03/10/21 23:39	1
Acrylonitrile	3.61	U	50.1	3.61	ug/Kg			03/10/21 23:39	1
cis-1,2-Dichloroethene	0.571	U	5.01	0.571	ug/Kg			03/10/21 23:39	1
Carbon tetrachloride	0.511	U	5.01	0.511	ug/Kg			03/10/21 23:39	1
Benzene	0.631	U	5.01	0.631	ug/Kg			03/10/21 23:39	1
1,2-Dichloroethane	0.521	U	5.01	0.521	ug/Kg			03/10/21 23:39	1
Trichloroethene	0.281	U	5.01	0.281	ug/Kg			03/10/21 23:39	1
1,1,1-Trichloroethane	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
1,1-Dichloroethane	0.591	U	5.01	0.591	ug/Kg			03/10/21 23:39	1
1,2-Dichloropropane	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/10/21 23:39	1
Chloroform	0.872	U	5.01	0.872	ug/Kg			03/10/21 23:39	1
Bromodichloromethane	0.200	U	5.01	0.200	ug/Kg			03/10/21 23:39	1
1,1-Dichloropropene	0.521	U	5.01	0.521	ug/Kg			03/10/21 23:39	1
cis-1,3-Dichloropropene	0.451	U	5.01	0.451	ug/Kg			03/10/21 23:39	1
Toluene	0.902	U	5.01	0.902	ug/Kg			03/10/21 23:39	1
trans-1,3-Dichloropropene	0.521	U	5.01	0.521	ug/Kg			03/10/21 23:39	1
1,1,2-Trichloroethane	0.501	U	5.01	0.501	ug/Kg			03/10/21 23:39	1
Tetrachloroethene	0.741	U	5.01	0.741	ug/Kg			03/10/21 23:39	1
1,3-Dichloropropene, Total	0.521	U	5.01	0.521	ug/Kg			03/10/21 23:39	1
1,2-Dibromoethane	0.301	U	5.01	0.301	ug/Kg			03/10/21 23:39	1
Monochlorobenzene	0.301	U	5.01	0.301	ug/Kg			03/10/21 23:39	1
Ethylbenzene	0.451	U	5.01	0.451	ug/Kg			03/10/21 23:39	1
Xylenes, Total	0.501	U	10.0	0.501	ug/Kg			03/10/21 23:39	1
Styrene	0.301	U	5.01	0.301	ug/Kg			03/10/21 23:39	1
Tribromomethane	0.511	U	5.01	0.511	ug/Kg			03/10/21 23:39	1
1,1,2,2-Tetrachloroethane	0.381	U	5.01	0.381	ug/Kg			03/10/21 23:39	1
1,4-Dichlorobenzene	0.321	U	5.01	0.321	ug/Kg			03/10/21 23:39	1
1,2-Dichlorobenzene	0.251	U	5.01	0.251	ug/Kg			03/10/21 23:39	1
1,2,4-Trichlorobenzene	0.972	U	5.01	0.972	ug/Kg			03/10/21 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*134*		*65 - 152*		*03/10/21 23:39*	*1*
Toluene-d8 (Surr)	*96*		*65 - 139*		*03/10/21 23:39*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.6	11.9	ug/Kg		03/16/21 09:20	03/17/21 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*98*		*30 - 164*	*03/16/21 09:20*	*03/17/21 21:11*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0103	U	0.329	0.0103	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Acenaphthylene	0.0818	~~U~~ UJ	0.329	0.0818	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Anthracene	0.0169	U	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Benzidine	0.987	U	3.29	0.987	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Benzo[a]anthracene	0.0199	U	0.329	0.0199	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Benzo[b]fluoranthene	0.0261	U	0.329	0.0261	mg/Kg		03/19/21 11:14	04/07/21 15:37	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 34 -BG-S-3-4-210305 **Lab Sample ID: 560-93104-2**
Date Collected: 03/05/21 11:10 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.0399	U	0.329	0.0399	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Benzo[g,h,i]perylene	0.0159	U	0.329	0.0159	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Benzo[a]pyrene	0.0199	U	0.329	0.0199	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Bis(2-chloroethyl)ether	0.0165	~~U~~ UJ	0.329	0.0165	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Di (2-ethylhexyl)phthalate	0.0458	U	0.329	0.0458	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Chrysene	0.0269	U	0.329	0.0269	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dibenz(a,h)anthracene	0.0189	U	0.329	0.0189	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dichlorobenzidine, 3,3'-	0.0897	U	0.658	0.0897	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Diethyl phthalate	0.0259	~~U~~ UJ	0.658	0.0259	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dimethyl phthalate	0.0229	U	0.329	0.0229	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dibutylphthalate	0.0289	U	0.329	0.0289	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2,4-Dinitrotoluene	0.0658	U	0.329	0.0658	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2,6-Dinitrotoluene	0.0279	~~U~~ UJ	0.329	0.0279	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0219	U	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Fluoranthene	0.0359	U	0.329	0.0359	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Fluorene	0.0179	~~U~~ UJ	0.329	0.0179	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Hexachlorobenzene	0.0289	U	0.329	0.0289	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Hexachlorobutadiene	0.00997	U	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Hexachlorocyclopentadiene	0.111	U	1.59	0.111	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Hexachloroethane	0.0212	~~U~~ UJ	0.329	0.0212	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Indeno[1,2,3-cd]pyrene	0.0219	U	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Isophorone	0.0169	U	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
1-Methylnaphthalene	0.0112	U	0.329	0.0112	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2-Methylnaphthalene	0.0189	~~U~~ UJ	0.329	0.0189	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Naphthalene	0.0309	~~U~~ UJ	0.329	0.0309	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Nitrobenzene	0.0219	U	0.329	0.0219	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
N-Nitrosodi-n-butylamine	0.0964	U	0.329	0.0964	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
N-Nitrosodiethylamine	0.0648	U	0.329	0.0648	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
N-Nitrosodimethylamine	0.0369	U	0.329	0.0369	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
N-Nitrosodiphenylamine	0.0209	U	0.329	0.0209	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
N-Nitrosopyrrolidine	0.0638	U	0.329	0.0638	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Pentachlorobenzene	0.0648	U	0.329	0.0648	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Phenanthrene	0.0169	U	0.329	0.0169	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Pyrene	0.0121	U	0.329	0.0121	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
1,2,4,5-Tetrachlorobenzene	0.0488	U	0.329	0.0488	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2,4-Dichlorophenol	0.00997	~~U~~ UJ	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dinitrophenols	0.332	U	1.59	0.332	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Dinitro-o-cresol	0.329	U	1.59	0.329	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Pentachlorophenol	0.329	U	1.59	0.329	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2,4,6-Trichlorophenol	0.00997	U	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
2,4,5-Trichlorophenol	0.00997	U	0.329	0.00997	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
Atrazine	0.0369	U	0.329	0.0369	mg/Kg		03/19/21 11:14	04/07/21 15:37	1
bis (2-chloroisopropyl) ether	0.0229	U	0.329	0.0229	mg/Kg		03/19/21 11:14	04/07/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*60*		*46 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*
2-Fluorobiphenyl	*62*		*46 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*
Terphenyl-d14	*76*		*46 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*
Phenol-d5 (Surr)	*65*		*46 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*

Eurofins Xenco, Corpus Christi

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 34 -BG-S-3-4-210305
Lab Sample ID: 560-93104-2
Date Collected: 03/05/21 11:10
Matrix: Solid
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*64*		*43 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*
2,4,6-Tribromophenol	*71*		*35 - 120*	*03/19/21 11:14*	*04/07/21 15:37*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0650	U	0.101	0.0650	mg/Kg		03/11/21 09:04	03/11/21 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*98*		*20 - 140*	*03/11/21 09:04*	*03/11/21 19:58*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.5	U	49.9	34.5	mg/Kg		03/12/21 07:33	03/16/21 19:08	1
C28-C36	34.5	U	49.9	34.5	mg/Kg		03/12/21 07:33	03/16/21 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*76*		*39 - 120*	*03/12/21 07:33*	*03/16/21 19:08*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.887	U	4.87	0.887	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Hexachlorocyclohexane, gamma-	1.74	U	4.87	1.74	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Hexachlorocyclohexane, beta-	1.69	U	4.87	1.69	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Hexachlorocyclohexane, delta-	1.65	U	4.87	1.65	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Heptachlor	1.54	U	4.87	1.54	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Aldrin	0.750	U	4.87	0.750	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Heptachlor epoxide	1.40	U	4.87	1.40	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Endosulfan I	1.17	U	4.87	1.17	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Dieldrin	1.07	U	4.87	1.07	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Endrin	1.85	U	4.87	1.85	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Endosulfan II	1.44	U	4.87	1.44	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
DDT	1.10	U	4.87	1.10	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Endrin aldehyde	1.28	U	4.87	1.28	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Endosulfan sulfate	1.25	U	4.87	1.25	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Chlordane (technical)	11.7	U	48.7	11.7	ug/Kg		03/11/21 08:26	03/15/21 20:49	1
Toxaphene	24.4	U	97.5	24.4	ug/Kg		03/11/21 08:26	03/15/21 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*30 - 120*	*03/11/21 08:26*	*03/15/21 20:49*	*1*
DCB Decachlorobiphenyl	*83*		*13 - 135*	*03/11/21 08:26*	*03/15/21 20:49*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1221	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1232	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1242	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1248	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1254	0.00542	U	0.0351	0.00542	mg/Kg		03/19/21 07:31	03/19/21 19:47	1
Aroclor 1260	0.0106	U	0.0351	0.0106	mg/Kg		03/19/21 07:31	03/19/21 19:47	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 34 -BG-S-3-4-210305 Lab Sample ID: 560-93104-2

Date Collected: 03/05/21 11:10 **Matrix: Solid**
Date Received: 03/09/21 12:18

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*32 - 132*	*03/19/21 07:31*	*03/19/21 19:47*	*1*
DCB Decachlorobiphenyl	*76*		*57 - 138*	*03/19/21 07:31*	*03/19/21 19:47*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0221	U	0.0973	0.0221	mg/Kg		03/16/21 15:34	03/18/21 09:51	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0418	U	0.195	0.0418	mg/Kg		03/16/21 15:34	03/18/21 09:51	1
2,4,6-Trinitrotoluene	0.0299	U	0.0973	0.0299	mg/Kg		03/16/21 15:34	03/18/21 09:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*		*83 - 122*	*03/16/21 15:34*	*03/18/21 09:51*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.124**	**J**	0.457	0.0753	ug/Kg		03/11/21 12:20	03/12/21 20:54	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.210	U	0.729	0.210	ug/Kg		03/16/21 13:05	04/01/21 13:11	1
Perfluorohexanesulfonic acid (PFHxS)	0.255	U	0.729	0.255	ug/Kg		03/16/21 13:05	04/01/21 13:11	1
Perfluorooctanesulfonic acid (PFOS)	0.128	U	0.729	0.128	ug/Kg		03/16/21 13:05	04/01/21 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:11*	*1*
13C8 PFOS	*103*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:11*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0700	U	0.187	0.0700	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Arsenic	**2.57**		0.933	0.373	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Barium	**268**		1.87	0.466	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Beryllium	**0.214**		0.0933	0.0373	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Cadmium	**0.0709**		0.0466	0.0224	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Chromium	**3.55**		0.933	0.420	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Iron	**3630**		11.2	5.60	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Copper	**1.85**		0.933	0.373	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Manganese	**41.1**		0.466	0.187	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Lead	**2.84**		0.280	0.117	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Antimony	0.187	~~U~~ UJ	0.466	0.187	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Selenium	0.299	U	0.466	0.299	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Thallium	0.187	U	0.466	0.187	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Zinc	**7.23**		4.66	1.87	mg/Kg		03/11/21 10:09	03/17/21 18:11	2
Uranium	**0.310**		0.0933	0.0373	mg/Kg		03/11/21 10:09	03/17/21 18:11	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0186~~ ~~J b~~	0.0301 UBJ	0.0301	0.0100	mg/Kg		03/24/21 17:26	03/24/21 20:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.164	U	0.431	0.164	mg/Kg		03/11/21 09:04	03/11/21 11:12	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93104-1
Project/Site: Chevron - Jal Land Farm Soils, 03/05/2021

Client Sample ID: Cell 34 -BG-S-3-4-210305
Lab Sample ID: 560-93104-2
Date Collected: 03/05/21 11:10
Matrix: Solid
Date Received: 03/09/21 12:18

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.1	~~HF~~ J	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	5.59		1.00	0.338	mg/Kg		03/30/21 13:14	03/30/21 14:19	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.18	J	10.2	5.01	mg/Kg			03/18/21 13:03	1
~~Nitrite as N~~	~~0.880~~	~~U~~	~~5.08~~	~~0.880~~	~~mg/Kg~~			~~03/18/21 13:03~~	~~1~~ R
Fluoride	4.24		0.508	0.339	mg/Kg			03/18/21 13:03	1
Nitrate as N	2.69	J	5.08	1.43	mg/Kg			03/18/21 13:03	1
Nitrate Nitrite as N	~~2.69~~	~~J b~~ 5.08 UB	5.08	0.280	mg/Kg			03/18/21 13:03	1
Sulfate	45.1		10.2	3.95	mg/Kg			03/18/21 13:03	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	177	~~H~~	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.356		0.0955	0.102	1.00	0.0823	pCi/g	03/16/21 15:31	04/06/21 08:04	1
Radium-228	0.176		0.140	0.141		0.165	pCi/g	03/16/21 15:31	04/06/21 08:04	1
Combined Radium 226 + 228	0.532		0.169	0.174		0.165	pCi/g	03/16/21 15:31	04/06/21 08:04	1

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 560
93106

eurofins | Environment Testing America

Client Information	Sampler: J. Stenmann	Lab PM: Kudchadkar, Sachin G	Carr	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 93106
Address: 630 Plaza Drive Suite 100	Due Date Requested:			
City: Highlands Ranch	TAT Requested (days): Std			
State, Zip: CO, 80129-2377				
Phone: 303-710-7537(Tel)	PO #:			
Email: Alison.Schaffer@arcadis.com	WO #:			
Project Name: Chevron - Jal Land Farm Soils	Project #: 56008683			
Site: Jal Landfarm	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_ DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
~~Cell 39-BG-S-3-4-210308~~	"			Solid																JS 3/8
Cell 35-BG-S-3-4-210308	3/8/21	1235	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell 39-BG-S-3-4-210308	3/8/21	1545	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank	—	—	—	Solid																
				Solid																
				Solid																
JS 3/8/21				Solid																
				Solid																
				Solid																
				Solid																
				Solid																

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed
☐ Return To Client ☐ Disposal B

560-93106 Chain of Custody

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company		Date/Time:	Company
Relinquished by:	3/8/21 1700	Arcadis	Received by:	03/09/21 1218	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: Temp = -0.5 / corrected = -0.9 IR-12

Ver: 01/16/2019

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

LCMS

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308
Lab Sample ID: 560-93106-1
Date Collected: 03/08/21 12:35
Matrix: Solid
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.730	U	5.00	0.730	ug/Kg			03/10/21 12:46	1
Chloromethane	1.20	U	5.00	1.20	ug/Kg			03/10/21 12:46	1
Vinyl chloride	0.600	U	5.00	0.600	ug/Kg			03/10/21 12:46	1
Bromomethane	1.10	U	5.00	1.10	ug/Kg			03/10/21 12:46	1
Trichlorofluoromethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
Acrolein	8.60	U	50.0	8.60	ug/Kg			03/10/21 12:46	1
1,1-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
trans-1,2-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
Methyl tert-butyl ether	0.610	U	5.00	0.610	ug/Kg			03/10/21 12:46	1
1,3-Dichlorobenzene	0.310	U	5.00	0.310	ug/Kg			03/10/21 12:46	1
Methylene Chloride	5.00	U	25.0	5.00	ug/Kg			03/10/21 12:46	1
Acrylonitrile	3.60	U	50.0	3.60	ug/Kg			03/10/21 12:46	1
cis-1,2-Dichloroethene	0.570	U	5.00	0.570	ug/Kg			03/10/21 12:46	1
Carbon tetrachloride	0.510	U	5.00	0.510	ug/Kg			03/10/21 12:46	1
Benzene	0.630	U	5.00	0.630	ug/Kg			03/10/21 12:46	1
1,2-Dichloroethane	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:46	1
Trichloroethene	0.280	U	5.00	0.280	ug/Kg			03/10/21 12:46	1
1,1,1-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
1,1-Dichloroethane	0.590	U	5.00	0.590	ug/Kg			03/10/21 12:46	1
1,2-Dichloropropane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/10/21 12:46	1
Chloroform	0.870	U	5.00	0.870	ug/Kg			03/10/21 12:46	1
Bromodichloromethane	0.200	U	5.00	0.200	ug/Kg			03/10/21 12:46	1
1,1-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:46	1
cis-1,3-Dichloropropene	0.450	U	5.00	0.450	ug/Kg			03/10/21 12:46	1
Toluene	0.900	U	5.00	0.900	ug/Kg			03/10/21 12:46	1
trans-1,3-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:46	1
1,1,2-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/10/21 12:46	1
Tetrachloroethene	0.740	U	5.00	0.740	ug/Kg			03/10/21 12:46	1
1,3-Dichloropropene, Total	0.520	U	5.00	0.520	ug/Kg			03/10/21 12:46	1
1,2-Dibromoethane	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:46	1
Monochlorobenzene	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:46	1
Ethylbenzene	0.450	U	5.00	0.450	ug/Kg			03/10/21 12:46	1
Xylenes, Total	0.500	U	10.0	0.500	ug/Kg			03/10/21 12:46	1
Styrene	0.300	U	5.00	0.300	ug/Kg			03/10/21 12:46	1
Tribromomethane	0.510	U	5.00	0.510	ug/Kg			03/10/21 12:46	1
1,1,2,2-Tetrachloroethane	0.380	U	5.00	0.380	ug/Kg			03/10/21 12:46	1
1,4-Dichlorobenzene	0.320	U	5.00	0.320	ug/Kg			03/10/21 12:46	1
1,2-Dichlorobenzene	0.250	U	5.00	0.250	ug/Kg			03/10/21 12:46	1
1,2,4-Trichlorobenzene	0.970	U	5.00	0.970	ug/Kg			03/10/21 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*65 - 152*		*03/10/21 12:46*	*1*
Toluene-d8 (Surr)	*100*		*65 - 139*		*03/10/21 12:46*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.2	11.9	ug/Kg		03/16/21 09:20	03/19/21 17:07	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308
Lab Sample ID: 560-93106-1
Date Collected: 03/08/21 12:35
Matrix: Solid
Date Received: 03/09/21 12:18

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	97		30 - 164	03/16/21 09:20	03/19/21 17:07	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00972	U * UJ	0.311	0.00972	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Acenaphthylene	0.0775	U * UJ	0.311	0.0775	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Anthracene	0.0160	U UJ	0.311	0.0160	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzidine	0.934	U	3.11	0.934	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzo[a]anthracene	0.0189	U UJ	0.311	0.0189	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzo[b]fluoranthene	0.0247	U	0.311	0.0247	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzo[k]fluoranthene	0.0377	U	0.311	0.0377	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzo[g,h,i]perylene	0.0151	U	0.311	0.0151	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Benzo[a]pyrene	0.0189	U UJ	0.311	0.0189	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Bis(2-chloroethyl)ether	0.0157	U * UJ	0.311	0.0157	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Di (2-ethylhexyl)phthalate	**0.0537**	**J**	0.311	0.0434	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Chrysene	0.0255	U UJ	0.311	0.0255	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dibenz(a,h)anthracene	0.0179	U	0.311	0.0179	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dichlorobenzidine, 3,3'-	0.0849	U	0.623	0.0849	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Diethyl phthalate	0.0245	U UJ	0.623	0.0245	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dimethyl phthalate	0.0217	U * UJ	0.311	0.0217	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dibutylphthalate	0.0274	U	0.311	0.0274	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
2,4-Dinitrotoluene	0.0623	U UJ	0.311	0.0623	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
2,6-Dinitrotoluene	0.0264	U * UJ	0.311	0.0264	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0208	U UJ	0.311	0.0208	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Fluoranthene	0.0340	U	0.311	0.0340	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Fluorene	0.0170	U UJ	0.311	0.0170	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Hexachlorobenzene	0.0274	U UJ	0.311	0.0274	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Hexachlorobutadiene	0.00943	U * UJ	0.311	0.00943	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Hexachlorocyclopentadiene	0.105	U	1.51	0.105	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Hexachloroethane	0.0201	U * UJ	0.311	0.0201	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Indeno[1,2,3-cd]pyrene	0.0208	U	0.311	0.0208	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Isophorone	0.0160	U *	0.311	0.0160	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
1-Methylnaphthalene	0.0106	U *	0.311	0.0106	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
2-Methylnaphthalene	0.0179	U * UJ	0.311	0.0179	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Naphthalene	0.0292	U *	0.311	0.0292	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Nitrobenzene	0.0208	U *	0.311	0.0208	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
N-Nitrosodi-n-butylamine	0.0912	U	0.311	0.0912	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
N-Nitrosodiethylamine	0.0613	U	0.311	0.0613	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
N-Nitrosodimethylamine	0.0349	U * UJ	0.311	0.0349	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
N-Nitrosodiphenylamine	0.0198	U UJ	0.311	0.0198	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
N-Nitrosopyrrolidine	0.0604	U	0.311	0.0604	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Pentachlorobenzene	0.0613	U	0.311	0.0613	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Phenanthrene	0.0160	U	0.311	0.0160	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Pyrene	0.0114	U	0.311	0.0114	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
1,2,4,5-Tetrachlorobenzene	0.0462	U * UJ	0.311	0.0462	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
2,4-Dichlorophenol	0.00943	U *	0.311	0.00943	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dinitrophenols	0.314	U	1.51	0.314	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Dinitro-o-cresol	0.311	U	1.51	0.311	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Pentachlorophenol	0.311	U	1.51	0.311	mg/Kg		03/22/21 09:29	03/28/21 03:10	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308 Lab Sample ID: 560-93106-1

Date Collected: 03/08/21 12:35 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.00943	U	0.311	0.00943	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
2,4,5-Trichlorophenol	0.00943	U UJ	0.311	0.00943	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
Atrazine	0.0349	U	0.311	0.0349	mg/Kg		03/22/21 09:29	03/28/21 03:10	1
bis (2-chloroisopropyl) ether	0.0217	U	0.311	0.0217	mg/Kg		03/22/21 09:29	03/28/21 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*62*		*46 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*
2-Fluorobiphenyl	*61*		*46 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*
Terphenyl-d14	*87*		*46 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*
Phenol-d5 (Surr)	*62*		*46 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*
2-Fluorophenol	*64*		*43 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*
2,4,6-Tribromophenol	*73*		*35 - 120*	*03/22/21 09:29*	*03/28/21 03:10*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0652	U	0.102	0.0652	mg/Kg		03/11/21 09:04	03/11/21 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*89*		*20 - 140*	*03/11/21 09:04*	*03/11/21 20:34*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	36.2	U	52.3	36.2	mg/Kg		03/12/21 07:33	03/16/21 19:35	1
C28-C36	36.2	U	52.3	36.2	mg/Kg		03/12/21 07:33	03/16/21 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*51*		*39 - 120*	*03/12/21 07:33*	*03/16/21 19:35*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.879	U	4.83	0.879	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Hexachlorocyclohexane, gamma-	1.73	U	4.83	1.73	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Hexachlorocyclohexane, beta-	1.67	U	4.83	1.67	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Hexachlorocyclohexane, delta-	1.63	U	4.83	1.63	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Heptachlor	1.53	U	4.83	1.53	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Aldrin	0.744	U	4.83	0.744	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Heptachlor epoxide	1.39	U	4.83	1.39	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Endosulfan I	1.16	U	4.83	1.16	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Dieldrin	1.06	U	4.83	1.06	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Endrin	1.84	U	4.83	1.84	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Endosulfan II	1.43	U	4.83	1.43	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
DDT	1.09	U	4.83	1.09	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Endrin aldehyde	1.27	U	4.83	1.27	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Endosulfan sulfate	1.24	U	4.83	1.24	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Chlordane (technical)	11.6	U	48.3	11.6	ug/Kg		03/11/21 08:26	03/15/21 21:02	1
Toxaphene	24.2	U	96.6	24.2	ug/Kg		03/11/21 08:26	03/15/21 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*30 - 120*	*03/11/21 08:26*	*03/15/21 21:02*	*1*
DCB Decachlorobiphenyl	*86*		*13 - 135*	*03/11/21 08:26*	*03/15/21 21:02*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308 Lab Sample ID: 560-93106-1

Date Collected: 03/08/21 12:35 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1221	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1232	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1242	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1248	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1254	0.00506	U	0.0327	0.00506	mg/Kg		03/19/21 07:31	03/19/21 20:56	1
Aroclor 1260	0.00991	U	0.0327	0.00991	mg/Kg		03/19/21 07:31	03/19/21 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*32 - 132*	*03/19/21 07:31*	*03/19/21 20:56*	*1*
DCB Decachlorobiphenyl	*70*		*57 - 138*	*03/19/21 07:31*	*03/19/21 20:56*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U	0.0940	0.0213	mg/Kg		03/16/21 15:34	03/18/21 10:14	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0404	U	0.188	0.0404	mg/Kg		03/16/21 15:34	03/18/21 10:14	1
2,4,6-Trinitrotoluene	0.0289	U	0.0940	0.0289	mg/Kg		03/16/21 15:34	03/18/21 10:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*		*83 - 122*	*03/16/21 15:34*	*03/18/21 10:14*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.156**	**J**	0.472	0.0778	ug/Kg		03/11/21 12:20	03/12/21 20:59	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.215	U	0.748	0.215	ug/Kg		03/16/21 13:05	04/01/21 13:19	1
Perfluorohexanesulfonic acid (PFHxS)	0.262	U	0.748	0.262	ug/Kg		03/16/21 13:05	04/01/21 13:19	1
Perfluorooctanesulfonic acid (PFOS)	0.131	U	0.748	0.131	ug/Kg		03/16/21 13:05	04/01/21 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:19*	*1*
13C8 PFOS	*103*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:19*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0671	U	0.179	0.0671	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Arsenic	**3.37**		0.894	0.358	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Barium	**501**		4.47	1.12	mg/Kg		03/11/21 10:09	03/19/21 16:42	5
Beryllium	**0.116**		0.0894	0.0358	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Cadmium	**0.0576**		0.0447	0.0215	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Chromium	**2.05**		0.894	0.403	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Iron	**1890**		10.7	5.37	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Copper	**1.14**		0.894	0.358	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Manganese	**22.9**		0.447	0.179	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Lead	**1.44**		0.268	0.112	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Antimony	0.179	U	0.447	0.179	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Selenium	0.286	U	0.447	0.286	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Thallium	0.179	U	0.447	0.179	mg/Kg		03/11/21 10:09	03/17/21 18:15	2

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 35 -BG-S-3-4-210308 Lab Sample ID: 560-93106-1

Date Collected: 03/08/21 12:35 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	4.52		4.47	1.79	mg/Kg		03/11/21 10:09	03/17/21 18:15	2
Uranium	0.461		0.0894	0.0358	mg/Kg		03/11/21 10:09	03/17/21 18:15	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0179~~ ~~J b~~ 0.0322 UBJ		0.0322	0.0107	mg/Kg		03/24/21 17:26	03/24/21 20:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.190	U	0.500	0.190	mg/Kg		03/11/21 09:04	03/11/21 11:27	1
pH	8.3	~~HF~~ J	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	0.335	U	0.992	0.335	mg/Kg		04/05/21 08:45	04/05/21 13:51	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.4		9.95	4.91	mg/Kg			03/18/21 13:25	1
~~Nitrite as N~~	~~0.863~~	~~U~~	~~4.98~~	~~0.863~~	~~mg/Kg~~			~~03/18/21 13:25~~	~~1~~ R
Fluoride	5.57		0.498	0.332	mg/Kg			03/18/21 13:25	1
Nitrate as N	1.52	J	4.98	1.40	mg/Kg			03/18/21 13:25	1
Nitrate Nitrite as N	~~1.52~~ ~~J b~~ 4.98 UB		4.98	0.275	mg/Kg			03/18/21 13:25	1
Sulfate	49.5		9.95	3.87	mg/Kg			03/18/21 13:25	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	112	H	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.895		0.192	0.213	1.00	0.134	pCi/g	03/16/21 15:31	04/06/21 07:52	1
Radium-228	0.0895	U	0.194	0.194		0.362	pCi/g	03/16/21 15:31	04/06/21 07:52	1
Combined Radium 226 + 228	0.985		0.273	0.288		0.362	pCi/g	03/16/21 15:31	04/06/21 07:52	1

Client Sample ID: Cell 39 -BG-S-3-4-210308 Lab Sample ID: 560-93106-2

Date Collected: 03/08/21 15:45 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.729	U	4.99	0.729	ug/Kg			03/10/21 13:12	1
Chloromethane	1.20	U	4.99	1.20	ug/Kg			03/10/21 13:12	1
Vinyl chloride	0.599	U	4.99	0.599	ug/Kg			03/10/21 13:12	1
Bromomethane	1.10	U	4.99	1.10	ug/Kg			03/10/21 13:12	1
Trichlorofluoromethane	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
Acrolein	8.58	U	49.9	8.58	ug/Kg			03/10/21 13:12	1
1,1-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
trans-1,2-Dichloroethene	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
Methyl tert-butyl ether	0.609	U	4.99	0.609	ug/Kg			03/10/21 13:12	1
1,3-Dichlorobenzene	0.309	U	4.99	0.309	ug/Kg			03/10/21 13:12	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 39 -BG-S-3-4-210308
Lab Sample ID: 560-93106-2
Date Collected: 03/08/21 15:45
Matrix: Solid
Date Received: 03/09/21 12:18

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	4.99	U	25.0	4.99	ug/Kg			03/10/21 13:12	1
Acrylonitrile	3.59	U	49.9	3.59	ug/Kg			03/10/21 13:12	1
cis-1,2-Dichloroethene	0.569	U	4.99	0.569	ug/Kg			03/10/21 13:12	1
Carbon tetrachloride	0.509	U	4.99	0.509	ug/Kg			03/10/21 13:12	1
Benzene	0.629	U	4.99	0.629	ug/Kg			03/10/21 13:12	1
1,2-Dichloroethane	0.519	U	4.99	0.519	ug/Kg			03/10/21 13:12	1
Trichloroethene	0.279	U	4.99	0.279	ug/Kg			03/10/21 13:12	1
1,1,1-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
1,1-Dichloroethane	0.589	U	4.99	0.589	ug/Kg			03/10/21 13:12	1
1,2-Dichloropropane	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
1,4-Dioxane	19.0	U	99.8	19.0	ug/Kg			03/10/21 13:12	1
Chloroform	0.868	U	4.99	0.868	ug/Kg			03/10/21 13:12	1
Bromodichloromethane	0.200	U	4.99	0.200	ug/Kg			03/10/21 13:12	1
1,1-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/10/21 13:12	1
cis-1,3-Dichloropropene	0.449	U	4.99	0.449	ug/Kg			03/10/21 13:12	1
Toluene	0.898	U	4.99	0.898	ug/Kg			03/10/21 13:12	1
trans-1,3-Dichloropropene	0.519	U	4.99	0.519	ug/Kg			03/10/21 13:12	1
1,1,2-Trichloroethane	0.499	U	4.99	0.499	ug/Kg			03/10/21 13:12	1
Tetrachloroethene	0.739	U	4.99	0.739	ug/Kg			03/10/21 13:12	1
1,3-Dichloropropene, Total	0.519	U	4.99	0.519	ug/Kg			03/10/21 13:12	1
1,2-Dibromoethane	0.299	U	4.99	0.299	ug/Kg			03/10/21 13:12	1
Monochlorobenzene	0.299	U	4.99	0.299	ug/Kg			03/10/21 13:12	1
Ethylbenzene	0.449	U	4.99	0.449	ug/Kg			03/10/21 13:12	1
Xylenes, Total	0.499	U	9.98	0.499	ug/Kg			03/10/21 13:12	1
Styrene	0.299	U	4.99	0.299	ug/Kg			03/10/21 13:12	1
Tribromomethane	0.509	U	4.99	0.509	ug/Kg			03/10/21 13:12	1
1,1,2,2-Tetrachloroethane	0.379	U	4.99	0.379	ug/Kg			03/10/21 13:12	1
1,4-Dichlorobenzene	0.319	U	4.99	0.319	ug/Kg			03/10/21 13:12	1
1,2-Dichlorobenzene	0.250	U	4.99	0.250	ug/Kg			03/10/21 13:12	1
1,2,4-Trichlorobenzene	0.968	U	4.99	0.968	ug/Kg			03/10/21 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*65 - 152*		*03/10/21 13:12*	*1*
Toluene-d8 (Surr)	*99*		*65 - 139*		*03/10/21 13:12*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.8	U	65.0	11.8	ug/Kg		03/16/21 09:20	03/19/21 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*96*		*30 - 164*	*03/16/21 09:20*	*03/19/21 17:31*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00942	~~U*~~ UJ	0.302	0.00942	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Acenaphthylene	0.0751	~~U*~~ UJ	0.302	0.0751	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Anthracene	0.0155	U	0.302	0.0155	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Benzidine	0.905	U	3.02	0.905	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Benzo[a]anthracene	0.0183	U	0.302	0.0183	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Benzo[b]fluoranthene	0.0240	U	0.302	0.0240	mg/Kg		03/22/21 09:29	03/28/21 05:10	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 39 -BG-S-3-4-210308 **Lab Sample ID: 560-93106-2**
Date Collected: 03/08/21 15:45 **Matrix: Solid**
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.0366	U	0.302	0.0366	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Benzo[g,h,i]perylene	0.0146	U	0.302	0.0146	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Benzo[a]pyrene	0.0183	U	0.302	0.0183	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Bis(2-chloroethyl)ether	0.0152	U UJ	0.302	0.0152	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Di (2-ethylhexyl)phthalate	0.0421	U	0.302	0.0421	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Chrysene	0.0247	U	0.302	0.0247	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dibenz(a,h)anthracene	0.0174	U	0.302	0.0174	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dichlorobenzidine, 3,3'-	0.0823	U	0.604	0.0823	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Diethyl phthalate	0.0238	U	0.604	0.0238	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dimethyl phthalate	0.0210	U UJ	0.302	0.0210	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dibutylphthalate	0.0265	U	0.302	0.0265	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2,4-Dinitrotoluene	0.0604	U	0.302	0.0604	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2,6-Dinitrotoluene	0.0256	U UJ	0.302	0.0256	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0201	U	0.302	0.0201	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Fluoranthene	0.0329	U	0.302	0.0329	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Fluorene	0.0165	U	0.302	0.0165	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Hexachlorobenzene	0.0265	U	0.302	0.0265	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Hexachlorobutadiene	0.00915	U UJ	0.302	0.00915	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Hexachlorocyclopentadiene	0.102	U	1.46	0.102	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Hexachloroethane	0.0195	U UJ	0.302	0.0195	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Indeno[1,2,3-cd]pyrene	0.0201	U	0.302	0.0201	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Isophorone	0.0155	U	0.302	0.0155	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
1-Methylnaphthalene	0.0102	U	0.302	0.0102	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2-Methylnaphthalene	0.0174	U UJ	0.302	0.0174	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Naphthalene	0.0284	U	0.302	0.0284	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Nitrobenzene	0.0201	U	0.302	0.0201	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
N-Nitrosodi-n-butylamine	0.0884	U	0.302	0.0884	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
N-Nitrosodiethylamine	0.0595	U	0.302	0.0595	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
N-Nitrosodimethylamine	0.0338	U UJ	0.302	0.0338	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
N-Nitrosodiphenylamine	0.0192	U	0.302	0.0192	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
N-Nitrosopyrrolidine	0.0585	U	0.302	0.0585	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Pentachlorobenzene	0.0595	U	0.302	0.0595	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Phenanthrene	0.0155	U	0.302	0.0155	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Pyrene	0.0111	U	0.302	0.0111	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
1,2,4,5-Tetrachlorobenzene	0.0448	U UJ	0.302	0.0448	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2,4-Dichlorophenol	0.00915	U	0.302	0.00915	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dinitrophenols	0.305	U	1.46	0.305	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Dinitro-o-cresol	0.302	U	1.46	0.302	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Pentachlorophenol	0.302	U	1.46	0.302	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2,4,6-Trichlorophenol	0.00915	U	0.302	0.00915	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
2,4,5-Trichlorophenol	0.00915	U	0.302	0.00915	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
Atrazine	0.0338	U	0.302	0.0338	mg/Kg		03/22/21 09:29	03/28/21 05:10	1
bis (2-chloroisopropyl) ether	0.0210	U	0.302	0.0210	mg/Kg		03/22/21 09:29	03/28/21 05:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*61*		*46 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*
2-Fluorobiphenyl	*63*		*46 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*
Terphenyl-d14	*84*		*46 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*
Phenol-d5 (Surr)	*67*		*46 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*

Eurofins Xenco, Corpus Christi

Released to Imaging: 5/27/2022 3:16:29 PM

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 39 -BG-S-3-4-210308
Lab Sample ID: 560-93106-2
Date Collected: 03/08/21 15:45
Matrix: Solid
Date Received: 03/09/21 12:18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*67*		*43 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*
2,4,6-Tribromophenol	*65*		*35 - 120*	*03/22/21 09:29*	*03/28/21 05:10*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0632	U	0.0984	0.0632	mg/Kg		03/11/21 09:04	03/11/21 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*76*		*20 - 140*	*03/11/21 09:04*	*03/11/21 21:10*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	34.7	U	50.2	34.7	mg/Kg		03/12/21 07:33	03/16/21 20:02	1
C28-C36	34.7	U	50.2	34.7	mg/Kg		03/12/21 07:33	03/16/21 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*86*		*39 - 120*	*03/12/21 07:33*	*03/16/21 20:02*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.906	U	4.98	0.906	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Hexachlorocyclohexane, gamma-	1.78	U	4.98	1.78	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Hexachlorocyclohexane, beta-	1.72	U	4.98	1.72	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Hexachlorocyclohexane, delta-	1.68	U	4.98	1.68	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Heptachlor	1.57	U	4.98	1.57	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Aldrin	0.767	U	4.98	0.767	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Heptachlor epoxide	1.43	U	4.98	1.43	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Endosulfan I	1.20	U	4.98	1.20	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Dieldrin	1.10	U	4.98	1.10	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Endrin	1.89	U	4.98	1.89	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Endosulfan II	1.47	U	4.98	1.47	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
DDT	1.13	U	4.98	1.13	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Endrin aldehyde	1.30	U	4.98	1.30	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Endosulfan sulfate	1.27	U*	4.98	1.27	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Chlordane (technical)	12.0	U	49.8	12.0	ug/Kg		03/11/21 08:26	03/15/21 21:15	1
Toxaphene	24.9	U	99.6	24.9	ug/Kg		03/11/21 08:26	03/15/21 21:15	1

UJ

UJ

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*30 - 120*	*03/11/21 08:26*	*03/15/21 21:15*	*1*
DCB Decachlorobiphenyl	*95*		*13 - 135*	*03/11/21 08:26*	*03/15/21 21:15*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1221	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1232	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1242	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1248	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1254	0.00507	U	0.0328	0.00507	mg/Kg		03/19/21 07:31	03/19/21 21:19	1
Aroclor 1260	0.00994	U	0.0328	0.00994	mg/Kg		03/19/21 07:31	03/19/21 21:19	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 39 -BG-S-3-4-210308
Lab Sample ID: 560-93106-2
Date Collected: 03/08/21 15:45
Matrix: Solid
Date Received: 03/09/21 12:18

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*32 - 132*	*03/19/21 07:31*	*03/19/21 21:19*	*1*
DCB Decachlorobiphenyl	*78*		*57 - 138*	*03/19/21 07:31*	*03/19/21 21:19*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0221	U	0.0974	0.0221	mg/Kg		03/16/21 15:34	03/18/21 11:23	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0419	U	0.195	0.0419	mg/Kg		03/16/21 15:34	03/18/21 11:23	1
2,4,6-Trinitrotoluene	0.0299	U	0.0974	0.0299	mg/Kg		03/16/21 15:34	03/18/21 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 11:23*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.142**	**J**	0.496	0.0817	ug/Kg		03/11/21 12:20	03/12/21 21:04	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.214	U	0.746	0.214	ug/Kg		03/16/21 13:05	04/01/21 13:28	1
Perfluorohexanesulfonic acid (PFHxS)	0.261	U	0.746	0.261	ug/Kg		03/16/21 13:05	04/01/21 13:28	1
Perfluorooctanesulfonic acid (PFOS)	0.130	U	0.746	0.130	ug/Kg		03/16/21 13:05	04/01/21 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*99*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:28*	*1*
13C8 PFOS	*104*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:28*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0641	U	0.171	0.0641	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Arsenic	**2.78**		0.855	0.342	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Barium	**334**		4.27	1.07	mg/Kg		03/11/21 10:09	03/19/21 16:46	5
Beryllium	**0.171**		0.0855	0.0342	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Cadmium	**0.0669**		0.0427	0.0205	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Chromium	**3.12**		0.855	0.385	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Iron	**3080**		10.3	5.13	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Copper	**1.80**		0.855	0.342	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Manganese	**39.4**		0.427	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Lead	**2.29**		0.256	0.107	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Antimony	0.171	U	0.427	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Selenium	0.274	U	0.427	0.274	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Thallium	0.171	U	0.427	0.171	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Zinc	**7.10**		4.27	1.71	mg/Kg		03/11/21 10:09	03/17/21 18:18	2
Uranium	**0.420**		0.0855	0.0342	mg/Kg		03/11/21 10:09	03/17/21 18:18	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0256~~ ~~J b~~ 0.0303 UBJ		0.0303	0.0101	mg/Kg		03/24/21 17:26	03/24/21 20:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.183	U	0.481	0.183	mg/Kg		03/11/21 09:04	03/11/21 11:29	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93106-1
Project/Site: Chevron - Jal Land Farm Soils, 03/08/2021

Client Sample ID: Cell 39 -BG-S-3-4-210308
Lab Sample ID: 560-93106-2
Date Collected: 03/08/21 15:45
Matrix: Solid
Date Received: 03/09/21 12:18

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.3	~~HF~~ J	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	0.408	J	0.992	0.335	mg/Kg		04/05/21 08:45	04/05/21 13:55	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.0		9.91	4.89	mg/Kg			03/18/21 13:47	1
Nitrite as N	~~0.884~~ ~~J b~~	4.96 UBJ	4.96	0.859	mg/Kg			03/18/21 13:47	1
Fluoride	5.79		0.496	0.331	mg/Kg			03/18/21 13:47	1
Nitrate as N	2.83	J	4.96	1.39	mg/Kg			03/18/21 13:47	1
Nitrate Nitrite as N	~~3.71~~ ~~J b~~	4.96 UB	4.96	0.274	mg/Kg			03/18/21 13:47	1
Sulfate	52.4		9.91	3.86	mg/Kg			03/18/21 13:47	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	141	~~H~~	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.677	Q	0.124	0.143	1.00	0.0808	pCi/g	03/16/21 15:31	04/06/21 08:13	1
Radium-228	0.219	Q	0.0994	0.102		0.142	pCi/g	03/16/21 15:31	04/06/21 08:13	1
Combined Radium 226 + 228	0.897		0.159	0.176		0.142	pCi/g	03/16/21 15:31	04/06/21 08:13	1

Released to Imaging: 5/27/2022 3:16:29 PM
Received by OCD: 5/5/2022 7:41:01 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78203-21039.1
Client Contact: Alison Schaffer	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #: 93140
Address: 630 Plaza Drive Suite 100	Due Date Requested:			
City: Highlands Ranch	TAT Requested (days): Std			
State, Zip: CO, 80129-2377				
Phone: 303-710-7537(Tel)	PO #:			
Email: Alison.Schaffer@arcadis.com	WO #:			
Project Name: Chevron - Jal Land Farm Soils	Project #: 56008683			
Site: Jal landfarm	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B- Volatiles	8270C- Semivolatiles/ 8081 Pesticides/ 8082 PCB	6860 - Perchlorate-Ddenver- soil jar 4 oz	8330B - Denver - soil jar 4 oz	PFC - Denver- plastic 16 oz jar	8270D_AgChem -Pensacola - soil jar 4 oz	2540C_Calcd - Local Method/ Moisture/ pH 9045	8015B_GRO	8015_DRO/ORO	GA-01_R_ra- Rad 226/228- St Louis- 2 plastic jars 16	9066- Phenolics/ 9012 Cyanide	300- Nitrate, Chloride, Sulfate; Fluoride	6020/7471- St Louis -soil jar 4 oz	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
Cell 36 - BG-S-3-4-210309	3/9/21	1130	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Cell 40-BG-S-3-4-210309	3/9/21	1440	C	Solid			1	1	1	1	1	1	1	1	1	1	1	1	1	11	
Temp Blank	—	—	—	Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	
				Solid																	

Js 3/09/21

560-93140 Chain of Custody

Loc: 560
93140

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/9/21 1700	Arcadis	Caitlyn Fonseca	03/10/2021 1110	EX
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		1.8 CP TB-10 2.2

Ver: 01/16/2019

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

GC VOA

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

GC Semi VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

HPLC/IC

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

LCMS

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309
Lab Sample ID: 560-93140-1
Date Collected: 03/09/21 11:30
Matrix: Solid
Date Received: 03/10/21 11:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.727	U	4.98	0.727	ug/Kg			03/12/21 16:58	1
Chloromethane	1.20	U	4.98	1.20	ug/Kg			03/12/21 16:58	1
Vinyl chloride	0.598	U	4.98	0.598	ug/Kg			03/12/21 16:58	1
Bromomethane	1.10	U	4.98	1.10	ug/Kg			03/12/21 16:58	1
Trichlorofluoromethane	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
Acrolein	8.57	U	49.8	8.57	ug/Kg			03/12/21 16:58	1
1,1-Dichloroethene	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
trans-1,2-Dichloroethene	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
Methyl tert-butyl ether	0.608	U	4.98	0.608	ug/Kg			03/12/21 16:58	1
1,3-Dichlorobenzene	0.309	U	4.98	0.309	ug/Kg			03/12/21 16:58	1
Methylene Chloride	4.98	U	24.9	4.98	ug/Kg			03/12/21 16:58	1
Acrylonitrile	3.59	U	49.8	3.59	ug/Kg			03/12/21 16:58	1
cis-1,2-Dichloroethene	0.568	U	4.98	0.568	ug/Kg			03/12/21 16:58	1
Carbon tetrachloride	0.508	U	4.98	0.508	ug/Kg			03/12/21 16:58	1
Benzene	0.627	U	4.98	0.627	ug/Kg			03/12/21 16:58	1
1,2-Dichloroethane	0.518	U	4.98	0.518	ug/Kg			03/12/21 16:58	1
Trichloroethene	0.279	U	4.98	0.279	ug/Kg			03/12/21 16:58	1
1,1,1-Trichloroethane	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
1,1-Dichloroethane	0.588	U	4.98	0.588	ug/Kg			03/12/21 16:58	1
1,2-Dichloropropane	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
1,4-Dioxane	18.9	U	99.6	18.9	ug/Kg			03/12/21 16:58	1
Chloroform	0.867	U	4.98	0.867	ug/Kg			03/12/21 16:58	1
Bromodichloromethane	0.199	U	4.98	0.199	ug/Kg			03/12/21 16:58	1
1,1-Dichloropropene	0.518	U	4.98	0.518	ug/Kg			03/12/21 16:58	1
cis-1,3-Dichloropropene	0.448	U	4.98	0.448	ug/Kg			03/12/21 16:58	1
Toluene	0.896	U	4.98	0.896	ug/Kg			03/12/21 16:58	1
trans-1,3-Dichloropropene	0.518	U	4.98	0.518	ug/Kg			03/12/21 16:58	1
1,1,2-Trichloroethane	0.498	U	4.98	0.498	ug/Kg			03/12/21 16:58	1
Tetrachloroethene	0.737	U	4.98	0.737	ug/Kg			03/12/21 16:58	1
1,3-Dichloropropene, Total	0.518	U	4.98	0.518	ug/Kg			03/12/21 16:58	1
1,2-Dibromoethane	0.299	U	4.98	0.299	ug/Kg			03/12/21 16:58	1
Monochlorobenzene	0.299	U	4.98	0.299	ug/Kg			03/12/21 16:58	1
Ethylbenzene	0.448	U	4.98	0.448	ug/Kg			03/12/21 16:58	1
Xylenes, Total	0.498	U	9.96	0.498	ug/Kg			03/12/21 16:58	1
Styrene	0.299	U	4.98	0.299	ug/Kg			03/12/21 16:58	1
Tribromomethane	0.508	U	4.98	0.508	ug/Kg			03/12/21 16:58	1
1,1,2,2-Tetrachloroethane	0.378	U	4.98	0.378	ug/Kg			03/12/21 16:58	1
1,4-Dichlorobenzene	0.319	U	4.98	0.319	ug/Kg			03/12/21 16:58	1
1,2-Dichlorobenzene	0.249	U	4.98	0.249	ug/Kg			03/12/21 16:58	1
1,2,4-Trichlorobenzene	0.966	U	4.98	0.966	ug/Kg			03/12/21 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*65 - 152*		*03/12/21 16:58*	*1*
Toluene-d8 (Surr)	*99*		*65 - 139*		*03/12/21 16:58*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.7	U	64.6	11.7	ug/Kg		03/16/21 09:20	03/19/21 17:56	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309
Lab Sample ID: 560-93140-1
Date Collected: 03/09/21 11:30
Matrix: Solid
Date Received: 03/10/21 11:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Triphenylphosphate	98		30 - 164	03/16/21 09:20	03/19/21 17:56	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0102	U	0.328	0.0102	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Acenaphthylene	0.0816	U *	0.328	0.0816	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Anthracene	0.0169	U	0.328	0.0169	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzidine	0.983	U	3.28	0.983	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzo[a]anthracene	0.0199	U	0.328	0.0199	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzo[b]fluoranthene	0.0260	U	0.328	0.0260	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzo[k]fluoranthene	0.0397	U	0.328	0.0397	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzo[g,h,i]perylene	0.0159	U	0.328	0.0159	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Benzo[a]pyrene	0.0199	U	0.328	0.0199	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Bis(2-chloroethyl)ether	0.0165	U *	0.328	0.0165	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Di (2-ethylhexyl)phthalate	0.0457	U	0.328	0.0457	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Chrysene	0.0268	U	0.328	0.0268	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dibenz(a,h)anthracene	0.0189	U	0.328	0.0189	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dichlorobenzidine, 3,3'-	0.0894	U	0.656	0.0894	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Diethyl phthalate	0.0258	U *	0.656	0.0258	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dimethyl phthalate	0.0228	U	0.328	0.0228	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dibutylphthalate	0.0288	U	0.328	0.0288	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
2,4-Dinitrotoluene	0.0656	U	0.328	0.0656	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
2,6-Dinitrotoluene	0.0278	U *	0.328	0.0278	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
1,2-Diphenylhydrazine(as Azobenzene)	0.0219	U	0.328	0.0219	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Fluoranthene	0.0358	U	0.328	0.0358	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Fluorene	0.0179	U *	0.328	0.0179	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Hexachlorobenzene	0.0288	U	0.328	0.0288	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Hexachlorobutadiene	0.00993	U	0.328	0.00993	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Hexachlorocyclopentadiene	0.110	U	1.59	0.110	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Hexachloroethane	0.0212	U *	0.328	0.0212	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Indeno[1,2,3-cd]pyrene	0.0219	U	0.328	0.0219	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Isophorone	0.0169	U	0.328	0.0169	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
1-Methylnaphthalene	0.0111	U	0.328	0.0111	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
2-Methylnaphthalene	0.0189	U *	0.328	0.0189	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Naphthalene	0.0308	U *	0.328	0.0308	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Nitrobenzene	0.0219	U	0.328	0.0219	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
N-Nitrosodi-n-butylamine	0.0961	U	0.328	0.0961	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
N-Nitrosodiethylamine	0.0646	U	0.328	0.0646	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
N-Nitrosodimethylamine	0.0368	U	0.328	0.0368	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
N-Nitrosodiphenylamine	0.0209	U	0.328	0.0209	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
N-Nitrosopyrrolidine	0.0636	U	0.328	0.0636	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Pentachlorobenzene	0.0646	U	0.328	0.0646	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Phenanthrene	0.0169	U	0.328	0.0169	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Pyrene	0.0120	U	0.328	0.0120	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
1,2,4,5-Tetrachlorobenzene	0.0487	U	0.328	0.0487	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
2,4-Dichlorophenol	0.00993	U *	0.328	0.00993	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dinitrophenols	0.331	U	1.59	0.331	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Dinitro-o-cresol	0.328	U	1.59	0.328	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Pentachlorophenol	0.328	U	1.59	0.328	mg/Kg		03/19/21 11:14	04/07/21 16:04	1

UJ

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309 Lab Sample ID: 560-93140-1

Date Collected: 03/09/21 11:30 **Matrix: Solid**
Date Received: 03/10/21 11:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.00993	U	0.328	0.00993	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
2,4,5-Trichlorophenol	0.00993	U	0.328	0.00993	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
Atrazine	0.0368	U	0.328	0.0368	mg/Kg		03/19/21 11:14	04/07/21 16:04	1
bis (2-chloroisopropyl) ether	0.0228	U	0.328	0.0228	mg/Kg		03/19/21 11:14	04/07/21 16:04	1

UJ

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*34*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*
2-Fluorobiphenyl	*37*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*
Terphenyl-d14	*84*		*46 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*
Phenol-d5 (Surr)	*36*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*
2-Fluorophenol	*35*	*X*	*43 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*
2,4,6-Tribromophenol	*68*		*35 - 120*	*03/19/21 11:14*	*04/07/21 16:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0648	U	0.101	0.0648	mg/Kg		03/11/21 09:04	03/11/21 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Trifluorotoluene (Surr)	*71*		*20 - 140*	*03/11/21 09:04*	*03/11/21 21:47*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	**56.9**		51.0	35.3	mg/Kg		03/12/21 07:33	03/17/21 11:18	1
C28-C36	35.3	U	51.0	35.3	mg/Kg		03/12/21 07:33	03/17/21 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*55*		*39 - 120*	*03/12/21 07:33*	*03/17/21 11:18*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.946	U	5.20	0.946	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Hexachlorocyclohexane, gamma-	1.86	U	5.20	1.86	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Hexachlorocyclohexane, beta-	1.80	U	5.20	1.80	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Hexachlorocyclohexane, delta-	1.76	U	5.20	1.76	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Heptachlor	1.64	U	5.20	1.64	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Aldrin	0.800	U	5.20	0.800	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Heptachlor epoxide	1.50	U	5.20	1.50	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Endosulfan I	1.25	U	5.20	1.25	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Dieldrin	1.14	U	5.20	1.14	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Endrin	1.98	U	5.20	1.98	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Endosulfan II	1.54	U	5.20	1.54	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
DDT	1.17	U	5.20	1.17	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Endrin aldehyde	1.36	U	5.20	1.36	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Endosulfan sulfate	1.33	U	5.20	1.33	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Chlordane (technical)	12.5	U	52.0	12.5	ug/Kg		03/12/21 08:59	03/15/21 21:54	1
Toxaphene	26.0	U	104	26.0	ug/Kg		03/12/21 08:59	03/15/21 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*30 - 120*	*03/12/21 08:59*	*03/15/21 21:54*	*1*
DCB Decachlorobiphenyl	*93*		*13 - 135*	*03/12/21 08:59*	*03/15/21 21:54*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309
Lab Sample ID: 560-93140-1
Date Collected: 03/09/21 11:30
Matrix: Solid
Date Received: 03/10/21 11:10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1221	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1232	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1242	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1248	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1254	0.00504	U	0.0326	0.00504	mg/Kg		03/19/21 07:31	03/19/21 21:42	1
Aroclor 1260	0.00987	U	0.0326	0.00987	mg/Kg		03/19/21 07:31	03/19/21 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*32 - 132*	*03/19/21 07:31*	*03/19/21 21:42*	*1*
DCB Decachlorobiphenyl	*77*		*57 - 138*	*03/19/21 07:31*	*03/19/21 21:42*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0212	U	0.0933	0.0212	mg/Kg		03/16/21 15:34	03/18/21 12:55	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0401	U	0.187	0.0401	mg/Kg		03/16/21 15:34	03/18/21 12:55	1
2,4,6-Trinitrotoluene	0.0286	U	0.0933	0.0286	mg/Kg		03/16/21 15:34	03/18/21 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 122*	*03/16/21 15:34*	*03/18/21 12:55*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.198**	**J**	0.466	0.0768	ug/Kg		03/12/21 14:32	03/26/21 19:25	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.218	U	0.757	0.218	ug/Kg		03/16/21 13:05	04/01/21 13:37	1
Perfluorohexanesulfonic acid (PFHxS)	0.265	U	0.757	0.265	ug/Kg		03/16/21 13:05	04/01/21 13:37	1
Perfluorooctanesulfonic acid (PFOS)	0.132	U	0.757	0.132	ug/Kg		03/16/21 13:05	04/01/21 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOA	*98*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:37*	*1*
13C8 PFOS	*102*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:37*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.691	U	1.84	0.691	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Arsenic	3.68	U	9.21	3.68	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Barium	**347**		18.4	4.60	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Beryllium	0.368	U	0.921	0.368	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Cadmium	0.221	U	0.460	0.221	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Chromium	4.14	U	9.21	4.14	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Iron	**2860**		110	55.2	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Copper	3.68	U	9.21	3.68	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Manganese	**41.5**		4.60	1.84	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Lead	**2.02**	**J**	2.76	1.15	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Antimony	1.84	U	4.60	1.84	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Selenium	2.95	U	4.60	2.95	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Thallium	1.84	U	4.60	1.84	mg/Kg		03/19/21 09:44	03/22/21 18:20	20

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 36-BG-S-3-4-210309 Lab Sample ID: 560-93140-1

Date Collected: 03/09/21 11:30 **Matrix: Solid**
Date Received: 03/10/21 11:10

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	18.4	U	46.0	18.4	mg/Kg		03/19/21 09:44	03/22/21 18:20	20
Uranium	**0.389**	**J**	0.921	0.368	mg/Kg		03/19/21 09:44	03/22/21 18:20	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0221~~	~~J b~~ 0.0295 UBJ	0.0295	0.00982	mg/Kg		03/24/21 17:28	03/24/21 21:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.207	U	0.543	0.207	mg/Kg		03/16/21 20:43	03/16/21 23:00	1
pH	**8.2**	~~HF~~	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	0.334	U	0.988	0.334	mg/Kg		04/05/21 08:45	04/05/21 13:57	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.5**		10.3	5.06	mg/Kg			03/18/21 14:08	1
~~Nitrite as N~~	~~0.889~~	~~U~~	~~5.13~~	~~0.889~~	~~mg/Kg~~			~~03/18/21 14:08~~	~~1~~ R
Fluoride	**5.33**		0.513	0.343	mg/Kg			03/18/21 14:08	1
Nitrate as N	**1.90**	**J**	5.13	1.44	mg/Kg			03/18/21 14:08	1
Nitrate Nitrite as N	~~1.90~~	~~J b~~ 5.13 UB	5.13	0.283	mg/Kg			03/18/21 14:08	1
Sulfate	**51.1**		10.3	3.99	mg/Kg			03/18/21 14:08	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**168**	~~H~~	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.842**		0.155	0.178	1.00	0.0750	pCi/g	03/15/21 20:52	04/05/21 06:45	1
Radium-228	0.115	U	0.335	0.335		0.375	pCi/g	03/15/21 20:52	04/05/21 06:45	1
Combined Radium 226 + 228	**0.957**		0.369	0.379		0.375	pCi/g	03/15/21 20:52	04/05/21 06:45	1

Client Sample ID: Cell 40-BG-S-3-4-210309 Lab Sample ID: 560-93140-2

Date Collected: 03/09/21 14:40 **Matrix: Solid**
Date Received: 03/10/21 11:10

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	0.730	U	5.00	0.730	ug/Kg			03/12/21 17:23	1
Chloromethane	1.20	U	5.00	1.20	ug/Kg			03/12/21 17:23	1
Vinyl chloride	0.600	U	5.00	0.600	ug/Kg			03/12/21 17:23	1
Bromomethane	1.10	U	5.00	1.10	ug/Kg			03/12/21 17:23	1
Trichlorofluoromethane	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
Acrolein	8.60	U	50.0	8.60	ug/Kg			03/12/21 17:23	1
1,1-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
trans-1,2-Dichloroethene	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
Methyl tert-butyl ether	0.610	U	5.00	0.610	ug/Kg			03/12/21 17:23	1
1,3-Dichlorobenzene	0.310	U	5.00	0.310	ug/Kg			03/12/21 17:23	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 40-BG-S-3-4-210309
Lab Sample ID: 560-93140-2
Date Collected: 03/09/21 14:40
Matrix: Solid
Date Received: 03/10/21 11:10

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	5.00	U	25.0	5.00	ug/Kg			03/12/21 17:23	1
Acrylonitrile	3.60	U	50.0	3.60	ug/Kg			03/12/21 17:23	1
cis-1,2-Dichloroethene	0.570	U	5.00	0.570	ug/Kg			03/12/21 17:23	1
Carbon tetrachloride	0.510	U	5.00	0.510	ug/Kg			03/12/21 17:23	1
Benzene	0.630	U	5.00	0.630	ug/Kg			03/12/21 17:23	1
1,2-Dichloroethane	0.520	U	5.00	0.520	ug/Kg			03/12/21 17:23	1
Trichloroethene	0.280	U	5.00	0.280	ug/Kg			03/12/21 17:23	1
1,1,1-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
1,1-Dichloroethane	0.590	U	5.00	0.590	ug/Kg			03/12/21 17:23	1
1,2-Dichloropropane	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
1,4-Dioxane	19.0	U	100	19.0	ug/Kg			03/12/21 17:23	1
Chloroform	0.870	U	5.00	0.870	ug/Kg			03/12/21 17:23	1
Bromodichloromethane	0.200	U	5.00	0.200	ug/Kg			03/12/21 17:23	1
1,1-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/12/21 17:23	1
cis-1,3-Dichloropropene	0.450	U	5.00	0.450	ug/Kg			03/12/21 17:23	1
Toluene	0.900	U	5.00	0.900	ug/Kg			03/12/21 17:23	1
trans-1,3-Dichloropropene	0.520	U	5.00	0.520	ug/Kg			03/12/21 17:23	1
1,1,2-Trichloroethane	0.500	U	5.00	0.500	ug/Kg			03/12/21 17:23	1
Tetrachloroethene	0.740	U	5.00	0.740	ug/Kg			03/12/21 17:23	1
1,3-Dichloropropene, Total	0.520	U	5.00	0.520	ug/Kg			03/12/21 17:23	1
1,2-Dibromoethane	0.300	U	5.00	0.300	ug/Kg			03/12/21 17:23	1
Monochlorobenzene	0.300	U	5.00	0.300	ug/Kg			03/12/21 17:23	1
Ethylbenzene	0.450	U	5.00	0.450	ug/Kg			03/12/21 17:23	1
Xylenes, Total	0.500	U	10.0	0.500	ug/Kg			03/12/21 17:23	1
Styrene	0.300	U	5.00	0.300	ug/Kg			03/12/21 17:23	1
Tribromomethane	0.510	U	5.00	0.510	ug/Kg			03/12/21 17:23	1
1,1,2,2-Tetrachloroethane	0.380	U	5.00	0.380	ug/Kg			03/12/21 17:23	1
1,4-Dichlorobenzene	0.320	U	5.00	0.320	ug/Kg			03/12/21 17:23	1
1,2-Dichlorobenzene	0.250	U	5.00	0.250	ug/Kg			03/12/21 17:23	1
1,2,4-Trichlorobenzene	0.970	U	5.00	0.970	ug/Kg			03/12/21 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*65 - 152*		*03/12/21 17:23*	*1*
Toluene-d8 (Surr)	*102*		*65 - 139*		*03/12/21 17:23*	*1*

Method: 8270D - Pesticides by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Prometon	11.9	U	65.3	11.9	ug/Kg		03/16/21 09:20	03/19/21 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate	*132*		*30 - 164*	*03/16/21 09:20*	*03/19/21 18:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0948	U	3.04	0.0948	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Acenaphthylene	0.756	U *	3.04	0.756	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Anthracene	0.156	U	3.04	0.156	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Benzidine	9.11	U	30.4	9.11	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Benzo[a]anthracene	0.184	U	3.04	0.184	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Benzo[b]fluoranthene	0.241	U	3.04	0.241	mg/Kg		03/19/21 11:14	04/07/21 16:30	1

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Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 40-BG-S-3-4-210309
Lab Sample ID: 560-93140-2
Date Collected: 03/09/21 14:40
Matrix: Solid
Date Received: 03/10/21 11:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.368	U	3.04	0.368	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Benzo[g,h,i]perylene	0.147	U	3.04	0.147	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Benzo[a]pyrene	0.184	U	3.04	0.184	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Bis(2-chloroethyl)ether	0.153	U *	3.04	0.153	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Di (2-ethylhexyl)phthalate	0.423	U	3.04	0.423	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Chrysene	0.248	U	3.04	0.248	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dibenz(a,h)anthracene	0.175	U	3.04	0.175	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dichlorobenzidine, 3,3'-	0.828	U	6.07	0.828	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Diethyl phthalate	0.239	U *	6.07	0.239	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dimethyl phthalate	0.212	U	3.04	0.212	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dibutylphthalate	0.267	U	3.04	0.267	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2,4-Dinitrotoluene	0.607	U	3.04	0.607	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2,6-Dinitrotoluene	0.258	U *	3.04	0.258	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
1,2-Diphenylhydrazine(as Azobenzene)	0.202	U	3.04	0.202	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Fluoranthene	0.331	U	3.04	0.331	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Fluorene	0.166	U *	3.04	0.166	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Hexachlorobenzene	0.267	U	3.04	0.267	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Hexachlorobutadiene	0.0920	U	3.04	0.0920	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Hexachlorocyclopentadiene	1.02	U	14.7	1.02	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Hexachloroethane	0.196	U *	3.04	0.196	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Indeno[1,2,3-cd]pyrene	0.202	U	3.04	0.202	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Isophorone	0.156	U	3.04	0.156	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
1-Methylnaphthalene	0.103	U	3.04	0.103	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2-Methylnaphthalene	0.175	U *	3.04	0.175	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Naphthalene	0.285	U *	3.04	0.285	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Nitrobenzene	0.202	U	3.04	0.202	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
N-Nitrosodi-n-butylamine	0.890	U	3.04	0.890	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
N-Nitrosodiethylamine	0.598	U	3.04	0.598	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
N-Nitrosodimethylamine	0.340	U	3.04	0.340	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
N-Nitrosodiphenylamine	0.193	U	3.04	0.193	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
N-Nitrosopyrrolidine	0.589	U	3.04	0.589	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Pentachlorobenzene	0.598	U	3.04	0.598	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Phenanthrene	0.156	U	3.04	0.156	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Pyrene	0.111	U	3.04	0.111	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
1,2,4,5-Tetrachlorobenzene	0.451	U	3.04	0.451	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2,4-Dichlorophenol	0.0920	U *	3.04	0.0920	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dinitrophenols	3.06	U	14.7	3.06	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Dinitro-o-cresol	3.04	U	14.7	3.04	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Pentachlorophenol	3.04	U	14.7	3.04	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2,4,6-Trichlorophenol	0.0920	U	3.04	0.0920	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
2,4,5-Trichlorophenol	0.0920	U	3.04	0.0920	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
Atrazine	0.340	U	3.04	0.340	mg/Kg		03/19/21 11:14	04/07/21 16:30	1
bis (2-chloroisopropyl) ether	0.212	U	3.04	0.212	mg/Kg		03/19/21 11:14	04/07/21 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*7*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:30*	*1*
2-Fluorobiphenyl	*7*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:30*	*1*
Terphenyl-d14	*9*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:30*	*1*
Phenol-d5 (Surr)	*8*	*X*	*46 - 120*	*03/19/21 11:14*	*04/07/21 16:30*	*1*

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Eurofins Xenco, Corpus Christi

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 40-BG-S-3-4-210309
Lab Sample ID: 560-93140-2
Date Collected: 03/09/21 14:40
Matrix: Solid
Date Received: 03/10/21 11:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	8	X	43 - 120	03/19/21 11:14	04/07/21 16:30	1
2,4,6-Tribromophenol	7	X	35 - 120	03/19/21 11:14	04/07/21 16:30	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.0822	J	0.0984	0.0632	mg/Kg		03/11/21 09:04	03/11/21 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	93		20 - 140	03/11/21 09:04	03/11/21 22:23	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10 - C28]	72.3		48.5	33.5	mg/Kg		03/12/21 07:33	03/17/21 11:45	1
C28-C36	33.5	U	48.5	33.5	mg/Kg		03/12/21 07:33	03/17/21 11:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	61		39 - 120	03/12/21 07:33	03/17/21 11:45	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclohexane, alpha-	0.934	U	5.13	0.934	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Hexachlorocyclohexane, gamma-	1.84	U	5.13	1.84	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Hexachlorocyclohexane, beta-	1.78	U	5.13	1.78	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Hexachlorocyclohexane, delta-	1.74	U	5.13	1.74	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Heptachlor	1.62	U	5.13	1.62	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Aldrin	0.791	U	5.13	0.791	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Heptachlor epoxide	1.48	U	5.13	1.48	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Endosulfan I	1.23	U	5.13	1.23	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Dieldrin	1.13	U	5.13	1.13	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Endrin	1.95	U	5.13	1.95	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Endosulfan II	1.52	U	5.13	1.52	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
DDT	1.16	U	5.13	1.16	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Endrin aldehyde	1.34	U	5.13	1.34	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Endosulfan sulfate	1.31	U	5.13	1.31	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Chlordane (technical)	12.3	U	51.3	12.3	ug/Kg		03/12/21 08:59	03/16/21 17:34	1
Toxaphene	25.7	U	103	25.7	ug/Kg		03/12/21 08:59	03/16/21 17:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 120	03/12/21 08:59	03/16/21 17:34	1
DCB Decachlorobiphenyl	97		13 - 135	03/12/21 08:59	03/16/21 17:34	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1221	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1232	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1242	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1248	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1254	0.00498	U	0.0322	0.00498	mg/Kg		03/19/21 07:31	03/19/21 22:05	1
Aroclor 1260	0.00976	U	0.0322	0.00976	mg/Kg		03/19/21 07:31	03/19/21 22:05	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 40-BG-S-3-4-210309
Lab Sample ID: 560-93140-2
Date Collected: 03/09/21 14:40
Matrix: Solid
Date Received: 03/10/21 11:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*69*		*32 - 132*	*03/19/21 07:31*	*03/19/21 22:05*	*1*
DCB Decachlorobiphenyl	*59*		*57 - 138*	*03/19/21 07:31*	*03/19/21 22:05*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0.0213	U	0.0938	0.0213	mg/Kg		03/16/21 15:34	03/18/21 14:04	1
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0403	U	0.188	0.0403	mg/Kg		03/16/21 15:34	03/18/21 14:04	1
2,4,6-Trinitrotoluene	0.0288	U	0.0938	0.0288	mg/Kg		03/16/21 15:34	03/18/21 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*94*		*83 - 122*	*03/16/21 15:34*	*03/18/21 14:04*	*1*

Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	**0.132**	**J**	0.473	0.0779	ug/Kg		03/12/21 14:32	03/26/21 19:41	1

Method: DV-LC-0012 - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.214	U	0.743	0.214	ug/Kg		03/16/21 13:05	04/01/21 13:46	1
Perfluorohexanesulfonic acid (PFHxS)	0.260	U	0.743	0.260	ug/Kg		03/16/21 13:05	04/01/21 13:46	1
Perfluorooctanesulfonic acid (PFOS)	0.130	U	0.743	0.130	ug/Kg		03/16/21 13:05	04/01/21 13:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	*97*		*57 - 153*	*03/16/21 13:05*	*04/01/21 13:46*	*1*
13C8 PFOS	*98*		*70 - 130*	*03/16/21 13:05*	*04/01/21 13:46*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.665	U	1.77	0.665	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Arsenic	3.55	U	8.86	3.55	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Barium	**299**		17.7	4.43	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Beryllium	0.355	U	0.886	0.355	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Cadmium	0.213	U	0.443	0.213	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Chromium	3.99	U	8.86	3.99	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Iron	**1980**		106	53.2	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Copper	3.55	U	8.86	3.55	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Manganese	**19.7**		4.43	1.77	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Lead	**1.36**	**J**	2.66	1.11	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Antimony	1.77	U	4.43	1.77	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Selenium	2.84	U	4.43	2.84	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Thallium	1.77	U	4.43	1.77	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Zinc	17.7	U	44.3	17.7	mg/Kg		03/19/21 09:44	03/22/21 18:24	20
Uranium	**0.365**	**J**	0.886	0.355	mg/Kg		03/19/21 09:44	03/22/21 18:24	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	~~0.0228~~ ~~J b~~	0.0290 UBJ	0.0290	0.00967	mg/Kg		03/24/21 17:28	03/24/21 21:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.198	U	0.521	0.198	mg/Kg		03/16/21 20:43	03/16/21 23:02	1

Eurofins Xenco, Corpus Christi

Client Sample Results

Client: ARCADIS U.S., Inc.
Job ID: 560-93140-1
Project/Site: Chevron - Jal Land Farm Soils, 03/09/2021

Client Sample ID: Cell 40-BG-S-3-4-210309
Lab Sample ID: 560-93140-2
Date Collected: 03/09/21 14:40
Matrix: Solid
Date Received: 03/10/21 11:10

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0	~~HF~~	0.1	0.1	SU			03/16/21 10:00	1
Phenols, Total	0.358	J	0.996	0.337	mg/Kg		04/05/21 08:45	04/05/21 13:58	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.8		10.0	4.95	mg/Kg			03/18/21 14:30	1
~~Nitrite as N~~	~~0.870~~	~~U~~	~~5.02~~	~~0.870~~	~~mg/Kg~~			~~03/18/21 14:30~~	R 1
Fluoride	5.70		0.502	0.335	mg/Kg			03/18/21 14:30	1
~~Nitrate as N~~	~~1.41~~	~~U~~	~~5.02~~	~~1.41~~	~~mg/Kg~~			~~03/18/21 14:30~~	R 1
Nitrate Nitrite as N	0.277	U	5.02	0.277	mg/Kg			03/18/21 14:30	1
Sulfate	935		10.0	3.91	mg/Kg			03/18/21 14:30	1

General Chemistry - 7 Day Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	524	~~H~~	10.0	10.0	mg/L			03/25/21 14:10	1

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.722	Q	0.137	0.156	1.00	0.0975	pCi/g	03/15/21 20:52	04/05/21 07:44	1
Radium-228	0.214		0.177	0.178		0.200	pCi/g	03/15/21 20:52	04/05/21 07:44	1
Combined Radium 226 + 228	0.936		0.224	0.237		0.200	pCi/g	03/15/21 20:52	04/05/21 07:44	1

Appendix C

Background Soil Concentration Bar Charts

Appendix C. Background Soil Concentration Bar Charts
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

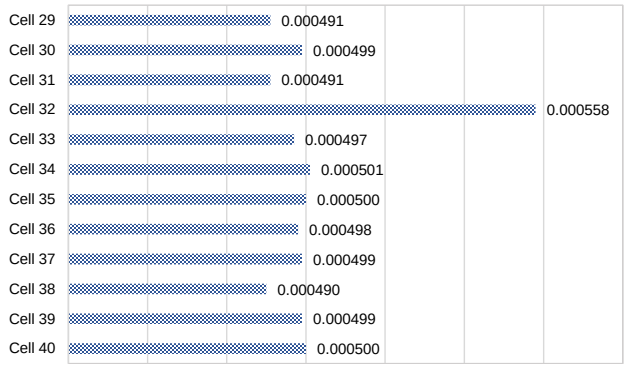
Figure	Plot	Analytical Group	Compound
C-1	1	VOCs	1,1,1-Trichloroethane
	2		1,1,2,2-Tetrachloroethane
	3		1,1,2-Trichloroethane
	4		1,1-Dichloroethane
	5		1,1-Dichloroethylene
	6		1,1-Dichloropropene
	7		1,2,4-Trichlorobenzene
	8		1,2-Dibromoethane
C-2	1	VOCs	1,2-Dichlorobenzene
	2		1,2-Dichloroethane
	3		1,2-Dichloropropane
	4		1,3-Dichlorobenzene
	5		1,3-Dichloropropene, Total
	6		1,4-Dichlorobenzene
	7		1,4-Dioxane
	8		Acrolein
C-3	1	VOCs	Acrylonitrile
	2		Benzene
	3		Bromodichloromethane
	4		Bromomethane
	5		Carbon Tetrachloride
	6		Chloroform
	7		Chloromethane
	8		cis-1,2-dichloroethene
C-4	1	VOCs	cis-1,3-Dichloropropene
	2		Dichlorodifluoromethane
	3		Ethylbenzene
	4		Methyl tert-butyl ether (MTBE)
	5		Methylene Chloride
	6		Monochlorobenzene
	7		Styrene
	8		Tetrachloroethylene (PCE)
C-5	1	VOCs	Toluene
	2		trans-1,2-Dichloroethene
	3		trans-1,3-Dichloropropene
	4		Tribromomethane
	5		Trichloroethylene (TCE)
	6		Trichlorofluoromethane
	7		Vinyl Chloride
	8		Xylenes, Total
C-6	1	Pesticides	Prometon
	2	SVOCs	1,2,4,5-Tetrachlorobenzene
	3		1,2-Diphenylhydrazine
	4		1-Methylnaphthalene
	5		2,4,5-Trichlorophenol
	6		2,4,6-Trichlorophenol
	7		2,4-Dichlorophenol
	8		2,4-Dinitro-o-cresol
C-7	1	SVOCs	2,4-Dinitrotoluene
	2		2,6-Dinitrotoluene
	3		2-Methylnaphthalene
	4		Acenaphthene
	5		Acenaphthylene
	6		Anthracene
	7		Atrazine
	8		Benzidine
C-8	1	SVOCs	Benzo(a)anthracene
	2		Benzo(a)pyrene
	3		Benzo(b)fluoranthene
	4		Benzo(g,h,i)perylene
	5		Benzo(k)fluoranthene
	6		Bis(2-chloroethyl)ether
	7		Bis(2-chloroisopropyl)ether
	8		Bis(2-ethylhexyl)phthalate
C-9	1	SVOCs	Chrysene
	2		Dibenz(a,h)anthracene
	3		Dibutylphthalate
	4		Dichlorobenzidine, 3,3'-
	5		Diethyl Phthalate
	6		Dimethyl Phthalate
	7		Dinitrophenols
	8		Fluoranthene
C-10	1	SVOCs	Fluorene
	2		Hexachlorobenzene
	3		Hexachlorobutadiene
	4		Hexachlorocyclopentadiene
	5		Hexachloroethane
	6		Indeno(1,2,3-cd)pyrene
	7		Isophorone
	8		Naphthalene
C-11	1	SVOCs	Nitrobenzene
	2		N-Nitrosodibutylamine
	3		N-Nitrosodiethylamine
	4		N-Nitrosodimethylamine
	5		N-Nitrosodiphenylamine
	6		N-Nitrosopyrrolidine
	7		Pentachlorobenzene
	8		Pentachlorophenol

Figure	Plot	Analytical Group	Compound
C-12	1	SVOCs	Phenanthrene
	2		Pyrene
	3	TPH-GRO	GRO (C6-C10)
	4	TPH-DRO & ORO	DRO (C10-C28)
	5		ORO (C28-C36)
	6	Organochlorine Pesticides	Aldrin
	7		Chlordane (technical)
	8		DDT
C-13	1	Organochlorine Pesticides	Dieldrin
	2		Endosulfan I
	3		Endosulfan II
	4		Endosulfan sulfate
	5		Endrin
	6		Endrin aldehyde
	7		Heptachlor
	8		Heptachlor epoxide
C-14	1	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-
	2		Hexachlorocyclohexane, beta-
	3		Hexachlorocyclohexane, delta-
	4		Hexachlorocyclohexane, gamma-
	5		Toxaphene
	6	PCBs	Aroclor 1016
	7		Aroclor 1221
	8		Aroclor 1232
C-15	1	PCBs	Aroclor 1242
	2		Aroclor 1248
	3		Aroclor 1254
	4		Aroclor 1260
	5	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene
	6		Hexahydro-1,3,5-trinitro-1,3,5-triazine
	7		Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
	8	Perchlorate	Perchlorate
C-16	1	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)
	2		Perfluorooctanesulfonic acid (PFOS)
	3		Perfluorohexanesulfonic acid (PFHxS)
	4	Metals	Antimony
	5		Arsenic
	6		Barium
	7		Beryllium
	8		Cadmium
C-17	1	Metals	Chromium
	2		Copper
	3		Iron
	4		Lead
	5		Manganese
	6		Selenium
	7		Silver
	8		Thallium
C-18	1	Metals	Uranium
	2		Zinc
	3		Mercury
	4	General Chemistry	Cyanide, Total
	5		pH
	6		Phenols, Total
	7	General Chemistry - Soluble	Chloride
	8		Fluoride
C-19	1	General Chemistry - Soluble	Nitrate as N
	2		Nitrate Nitrite as N
	3		Nitrite as N
	4		Sulfate
	5	General Chemistry - 7 Day Leach	Total Dissolved Solids
	6	Radium-226 & Other Gamma Emitters	Radium-226
	7		Radium-228
	8		Combined Radium 226/228

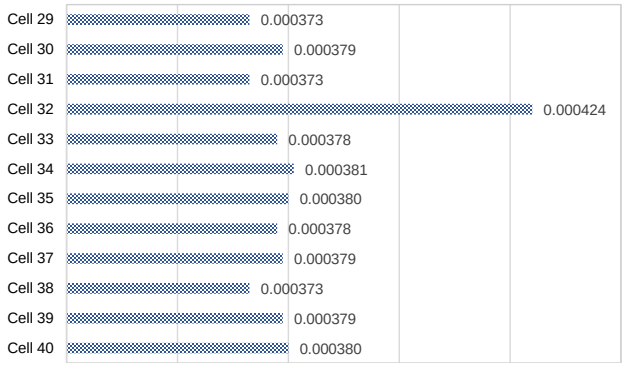
Abbreviations:
PCBs = polychlorinated biphenyls
SVOCs = semivolatile organic compounds
TPH-DRO & ORO = total petroleum hydrocarbons - diesel range organics & oil range organics
TPH-GRO = total petroleum hydrocarbons - gasoline range organics
VOCs = volatile organic compounds

C-1	**Background Soil Concentration Bar Charts - VOCs** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

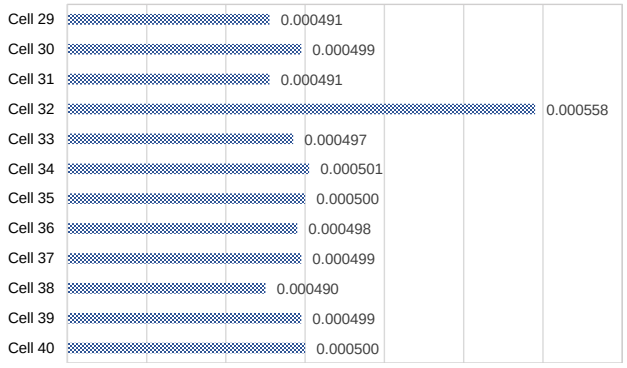
1,1,1-Trichloroethane (mg/kg)



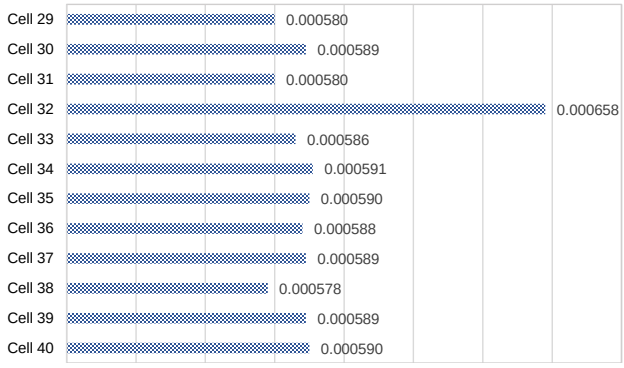
1,1,2,2-Tetrachloroethane (mg/kg)



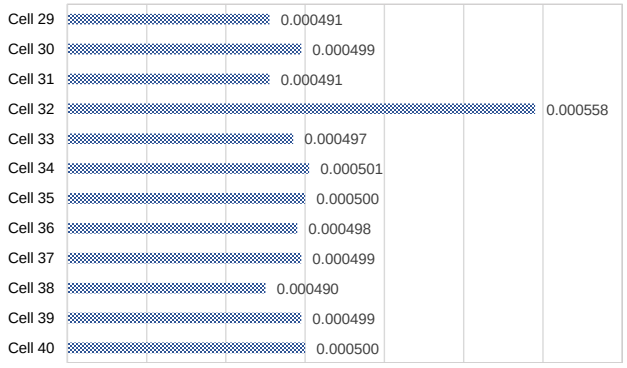
1,1,2-Trichloroethane (mg/kg)



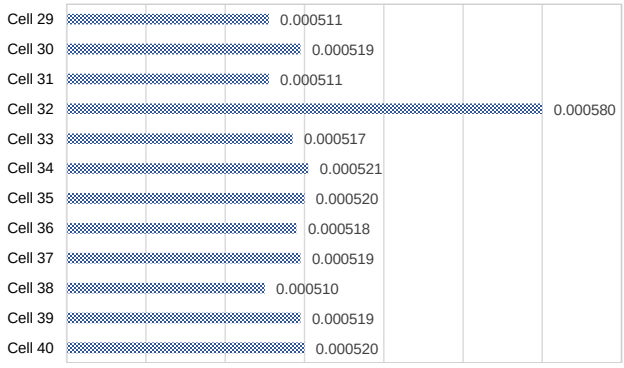
1,1-Dichloroethane (mg/kg)



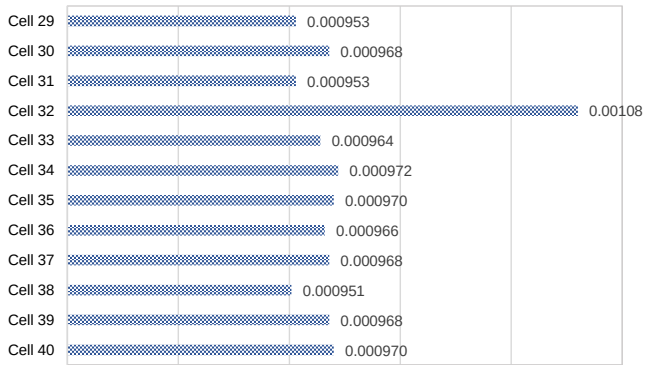
1,1-Dichloroethylene (mg/kg)



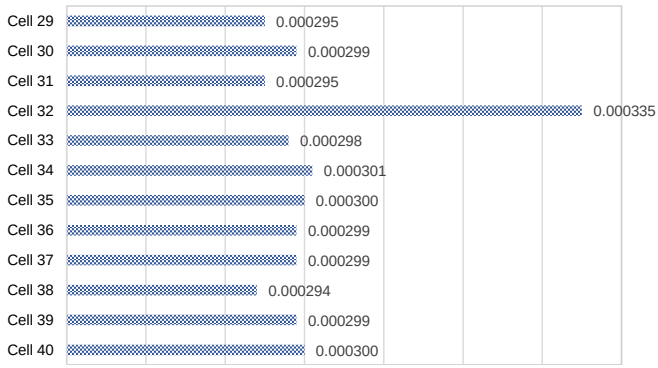
1,1-Dichloropropene (mg/kg)



1,2,4-Trichlorobenzene (mg/kg)



1,2-Dibromoethane (mg/kg)

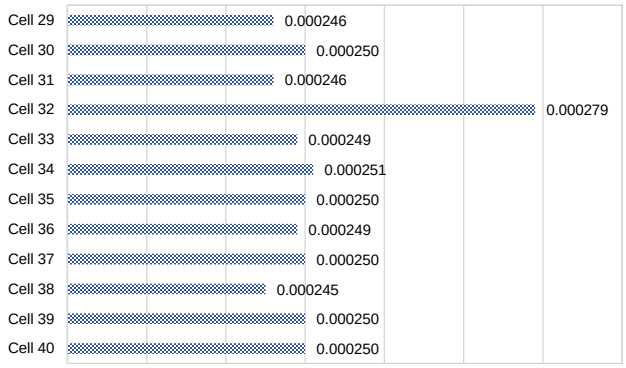


Abbreviations:
mg/kg = milligrams per kilogram VOCs = volatile organic compounds

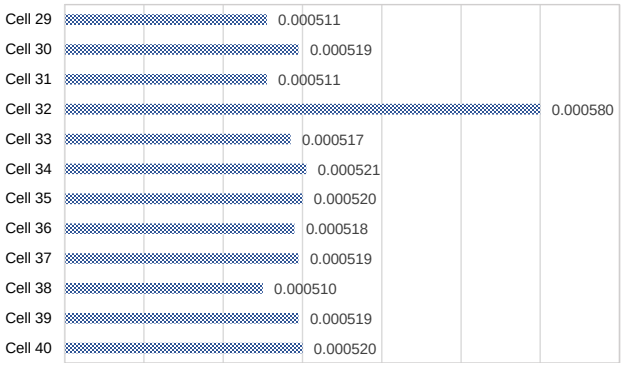
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

C-2	**Background Soil Concentration Bar Charts - VOCs** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

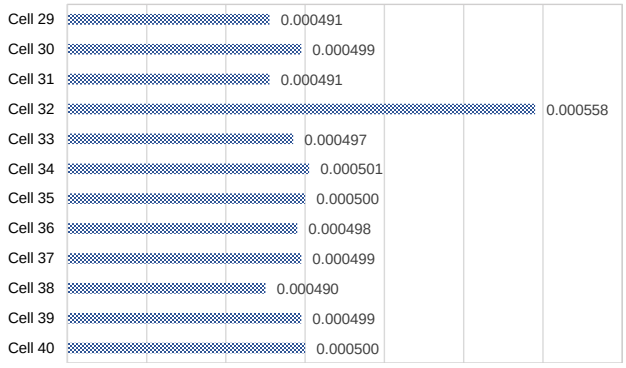
1,2-Dichlorobenzene (mg/kg)



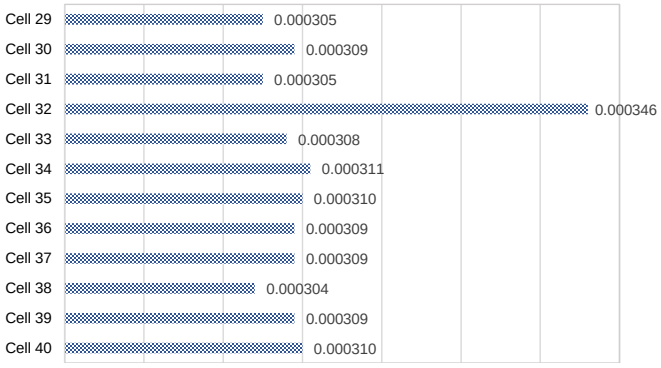
1,2-Dichloroethane (mg/kg)



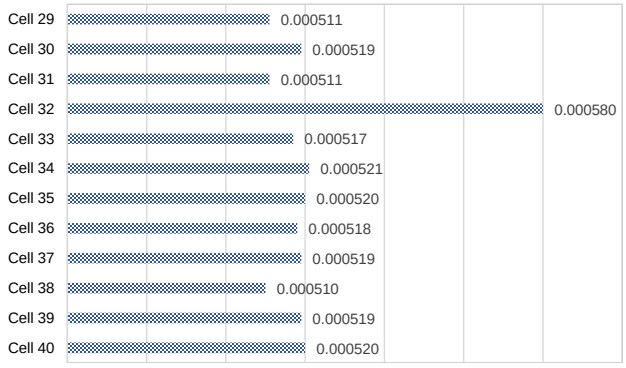
1,2-Dichloropropane (mg/kg)



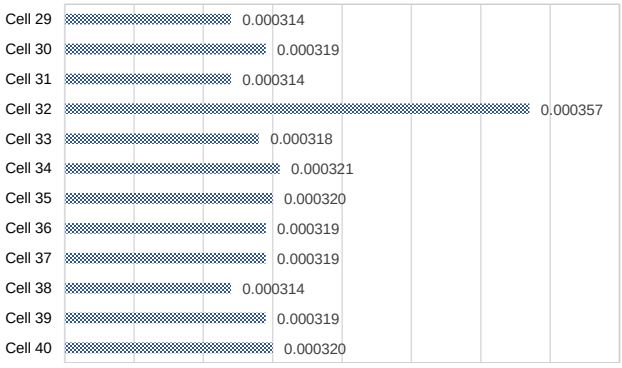
1,3-Dichlorobenzene (mg/kg)



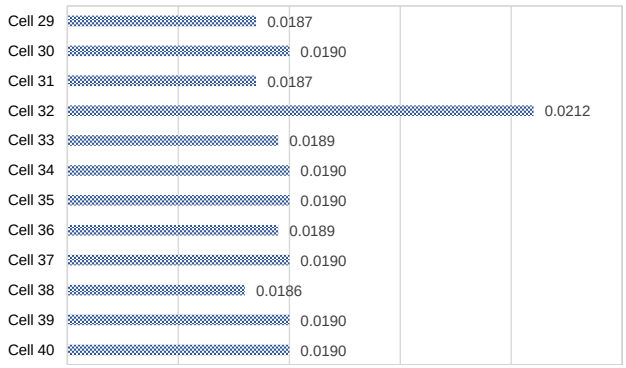
1,3-Dichloropropene, Total (mg/kg)



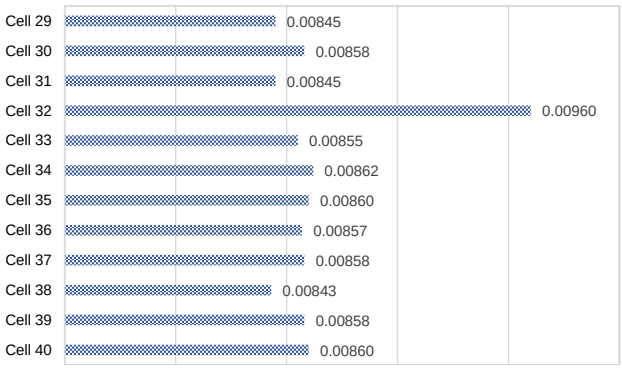
1,4-Dichlorobenzene (mg/kg)



1,4-Dioxane (mg/kg)



Acrolein (mg/kg)



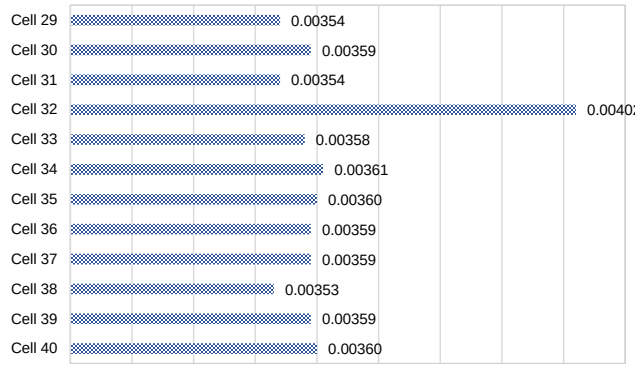
Abbreviations:
mg/kg = milligrams per kilogram VOCs = volatile organic compounds

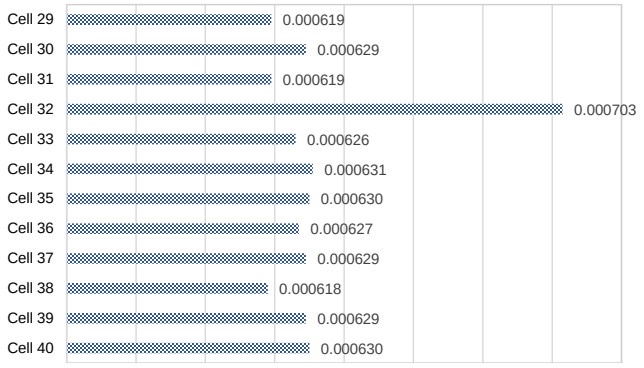
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

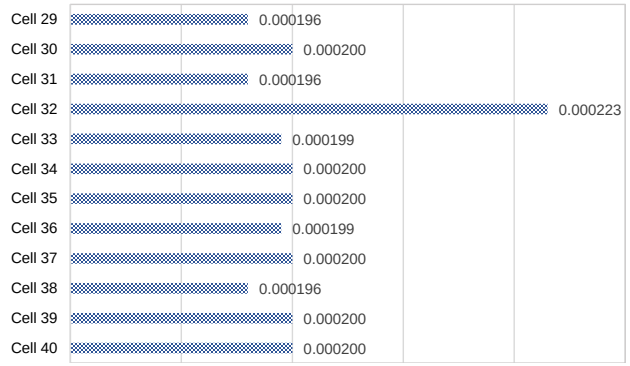
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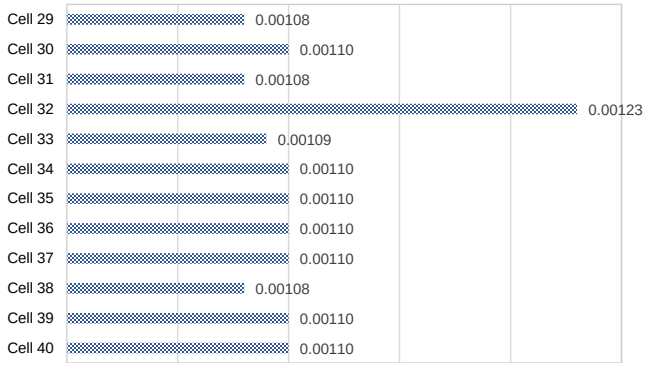
Background Soil Concentration Bar Charts - VOCs
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility
Lea County, New Mexico

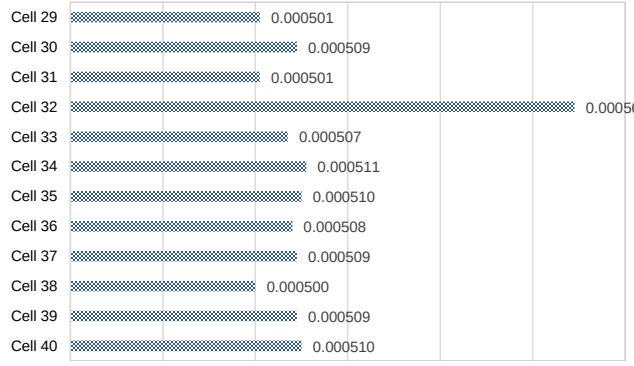
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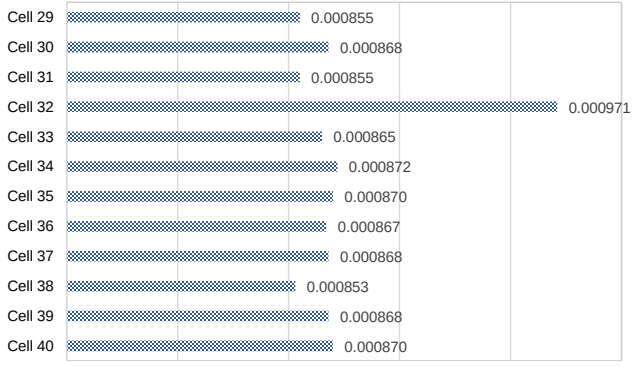


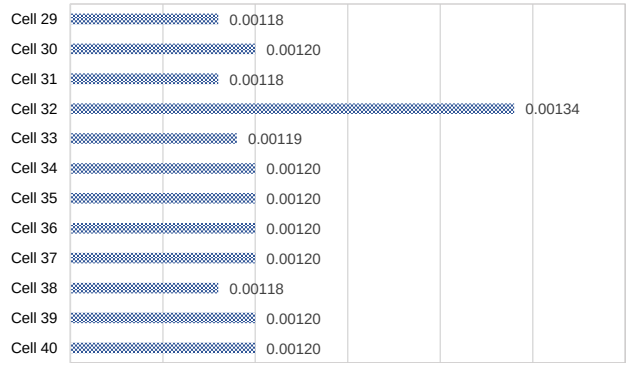


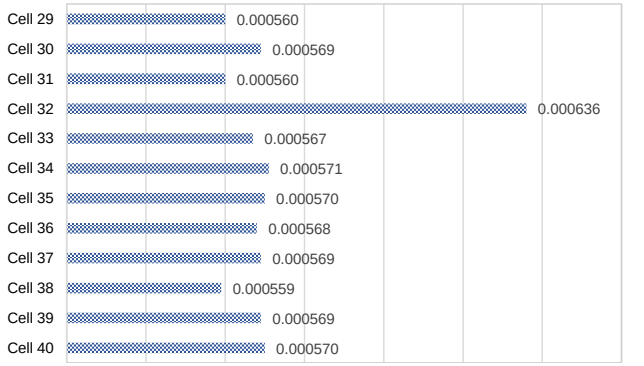












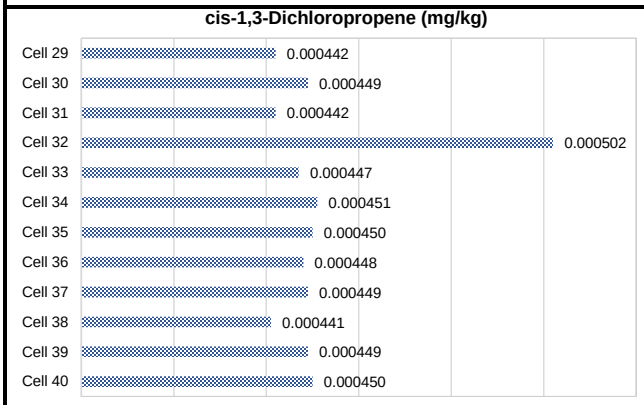
Abbreviations:
mg/kg = milligrams per kilogram VOCs = volatile organic compounds

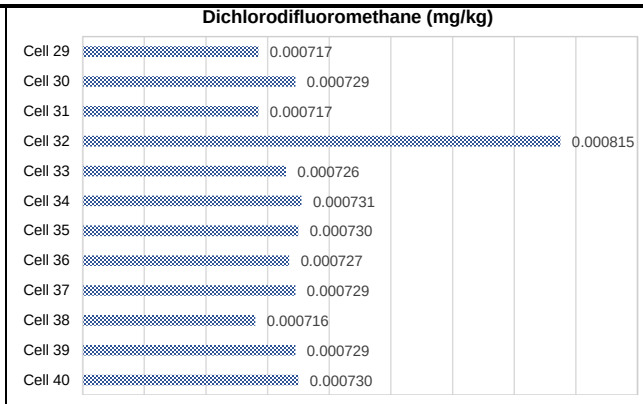
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

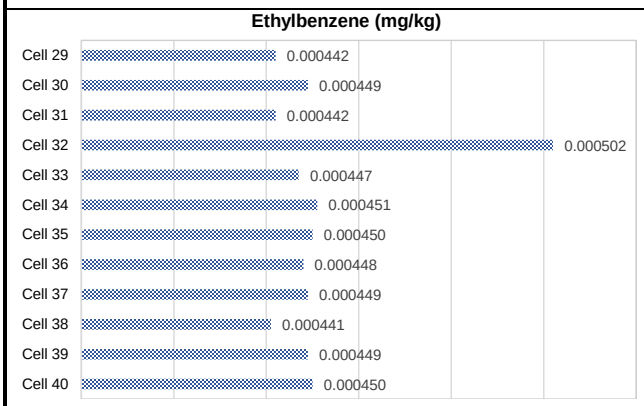
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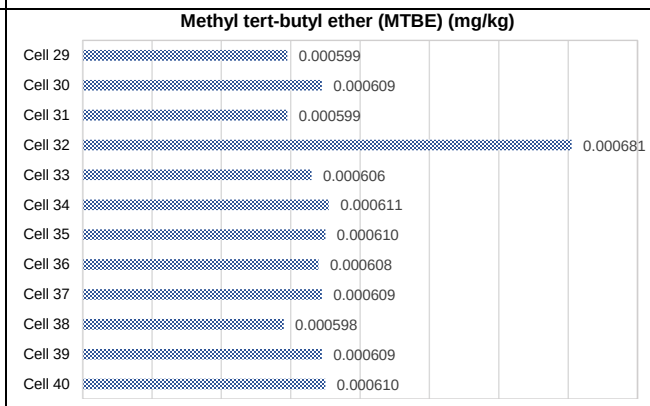
Background Soil Concentration Bar Charts - VOCs
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility
Lea County, New Mexico

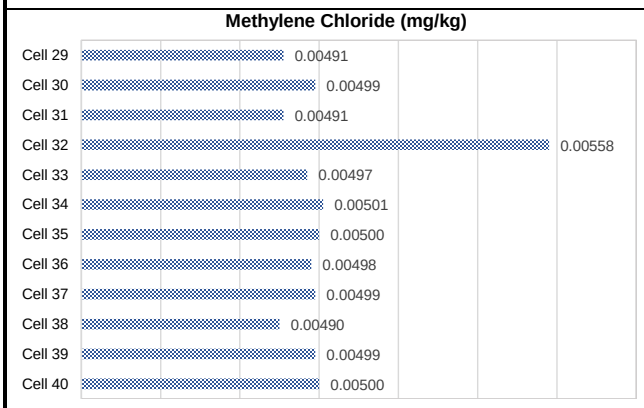
ARCADIS

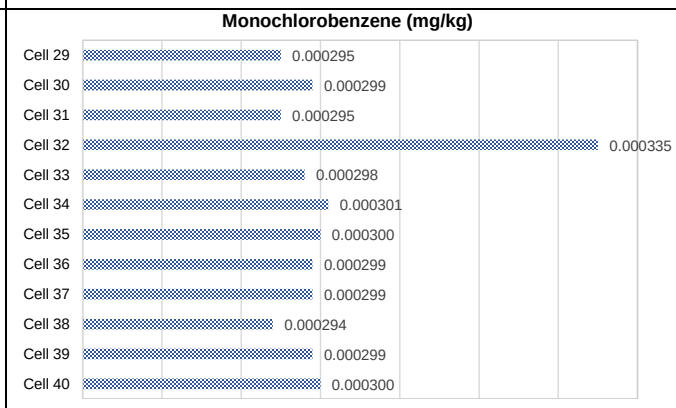


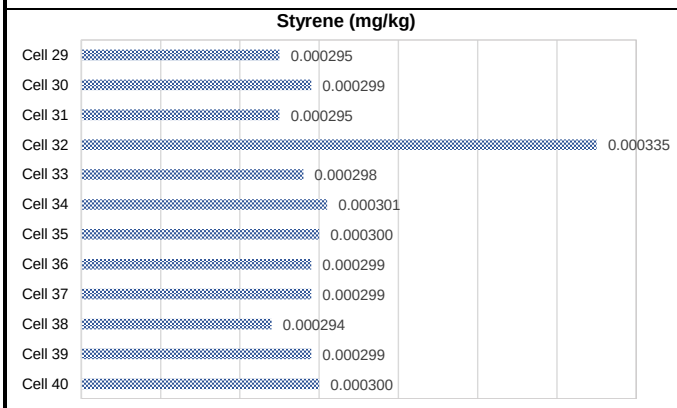


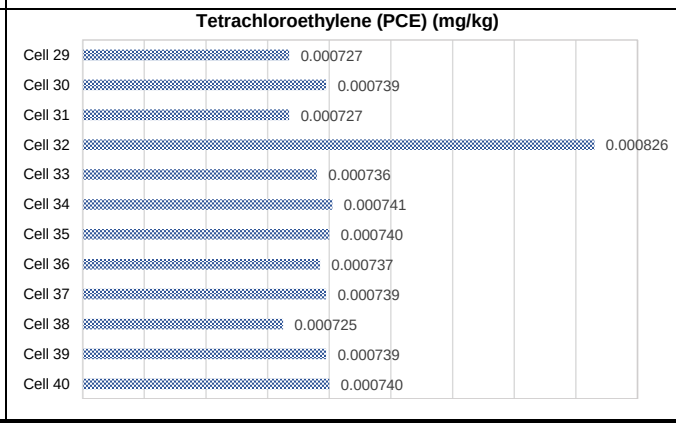












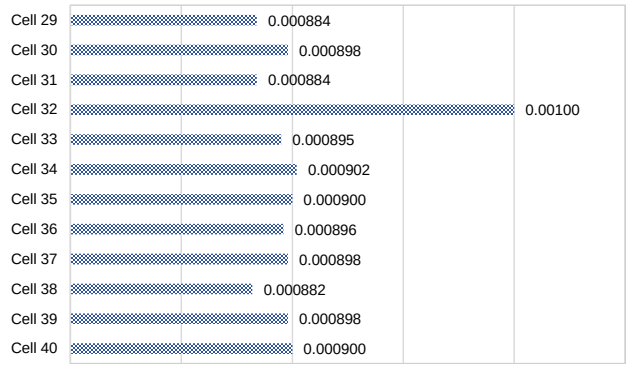
Abbreviations:
mg/kg = milligrams per kilogram VOCs = volatile organic compounds

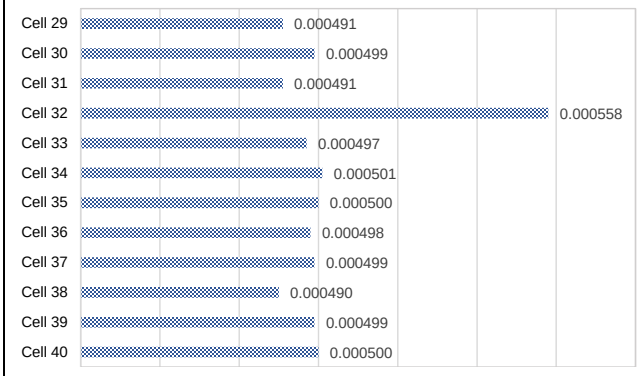
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

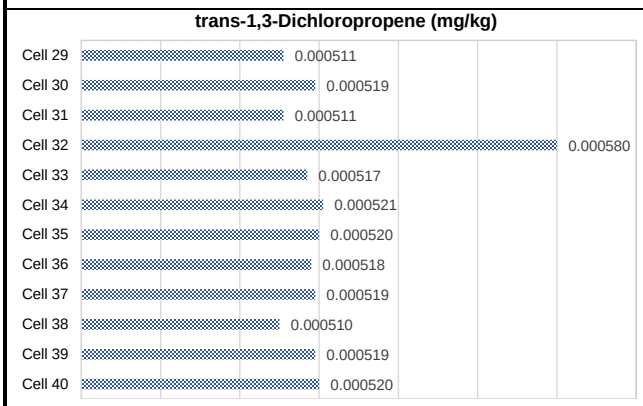
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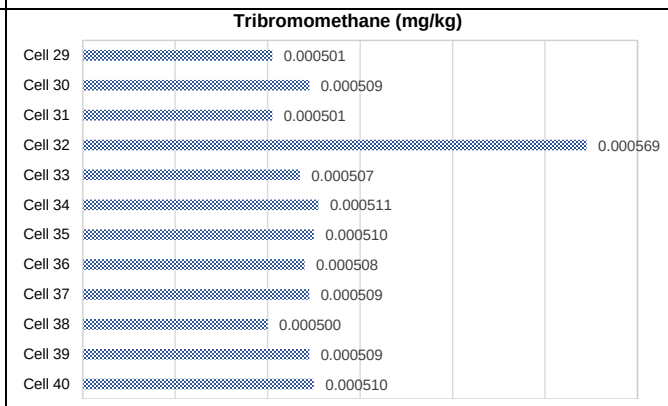
Background Soil Concentration Bar Charts - VOCs
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility
Lea County, New Mexico

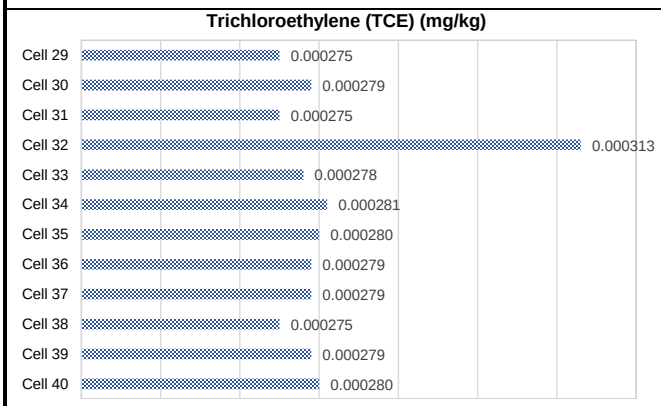
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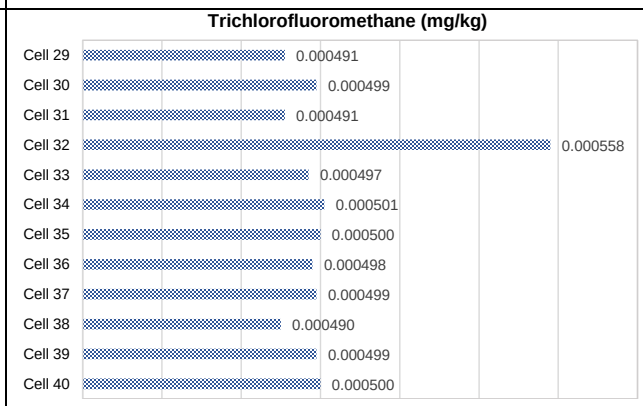


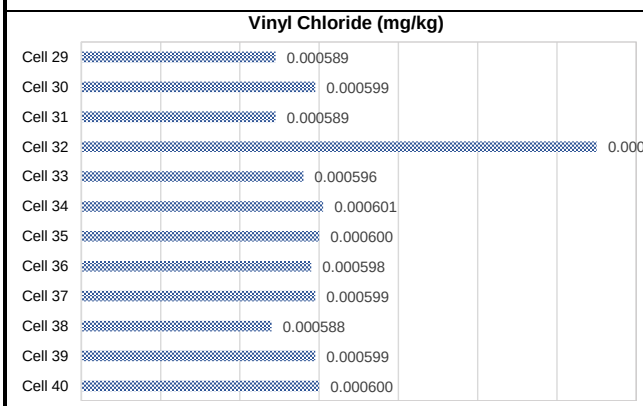


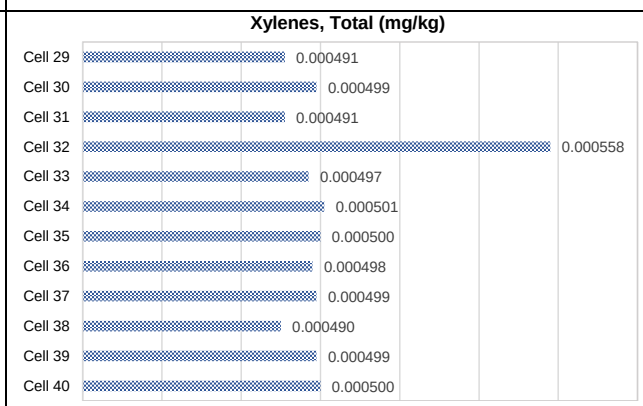












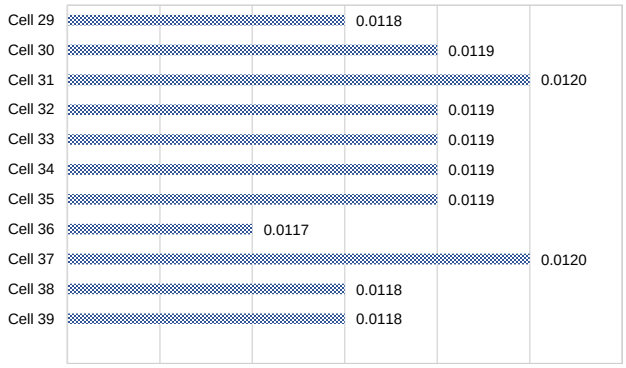
Abbreviations:
mg/kg = milligrams per kilogram VOCs = volatile organic compounds

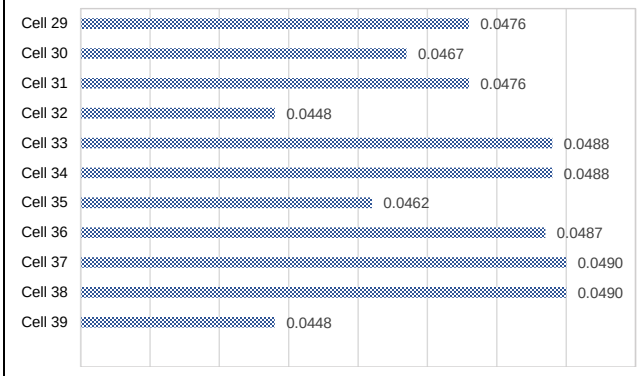
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

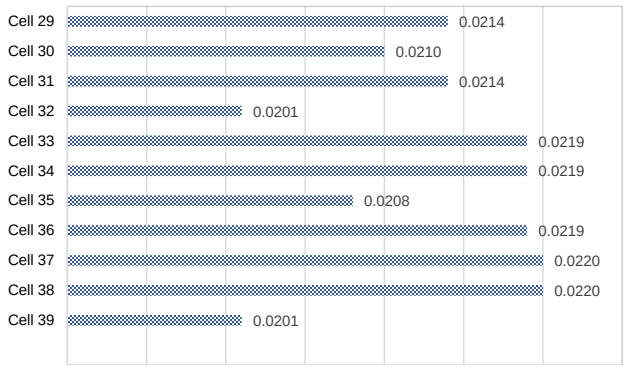
C-6

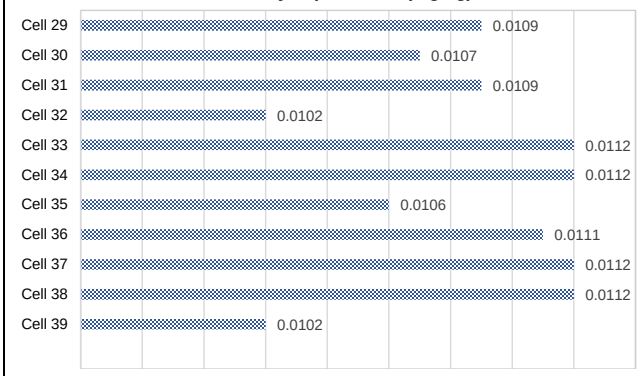
Background Soil Concentration Bar Charts - Pesticides & SVOCs
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility
Lea County, New Mexico

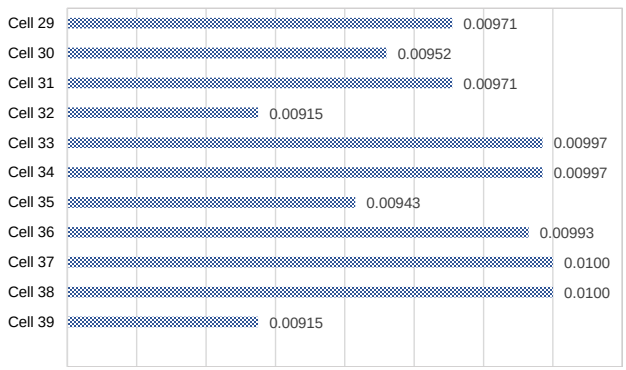
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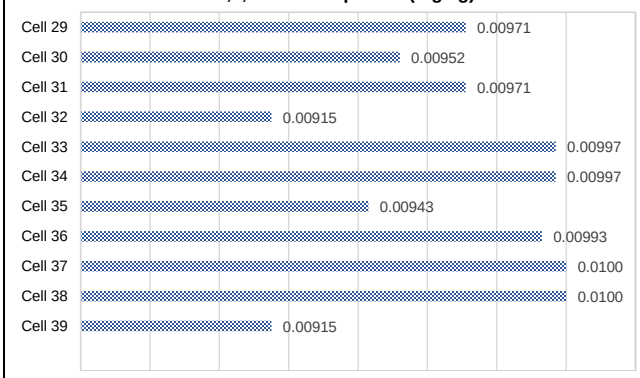


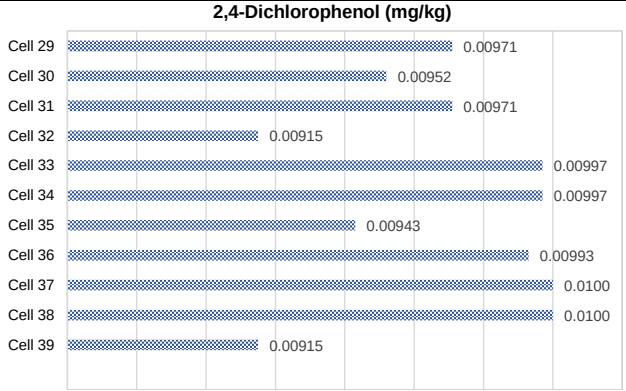


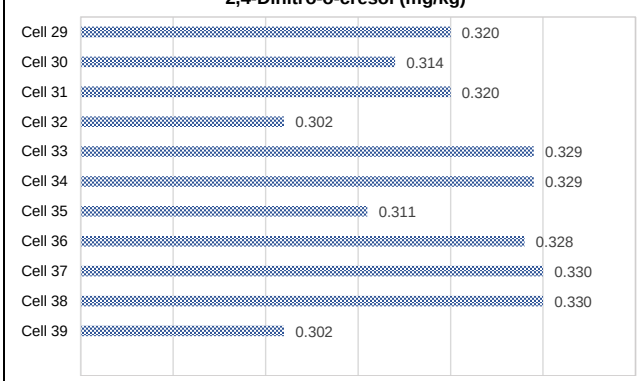










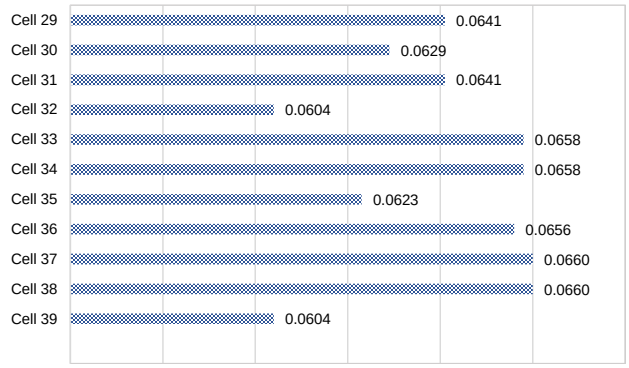


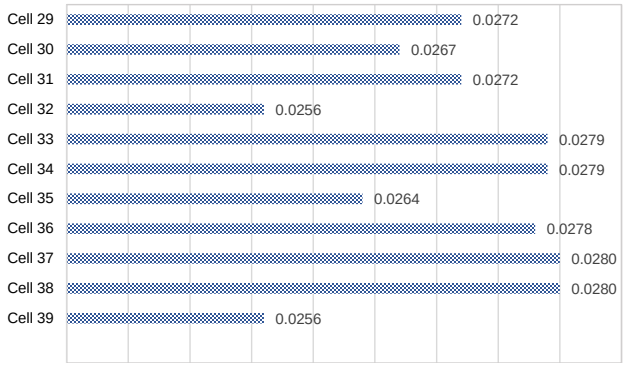
Abbreviations:
mg/kg = milligrams per kilogram SVOCs = semivolatile organic compounds
Notes:
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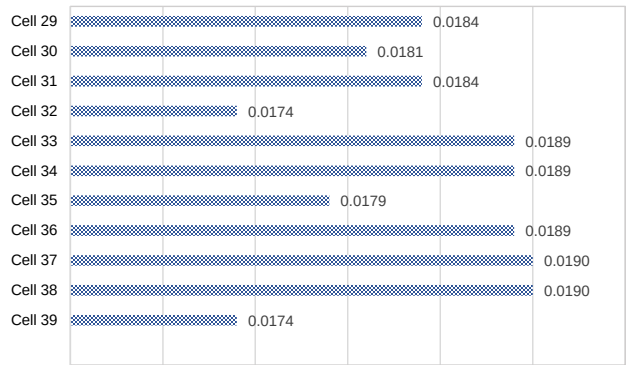
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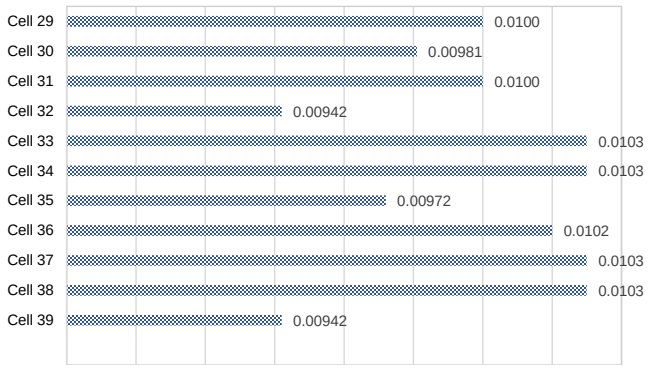
Background Soil Concentration Bar Charts - SVOCs
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility
Lea County, New Mexico

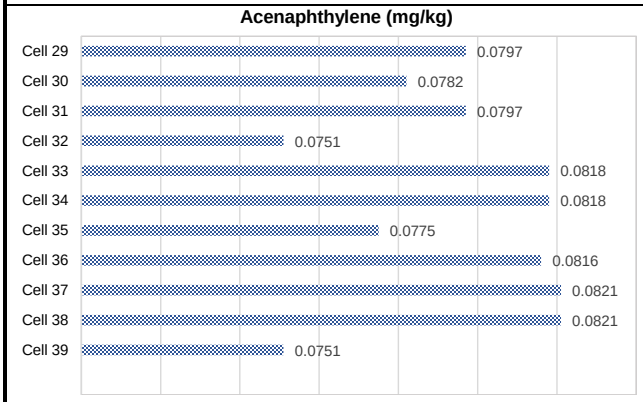
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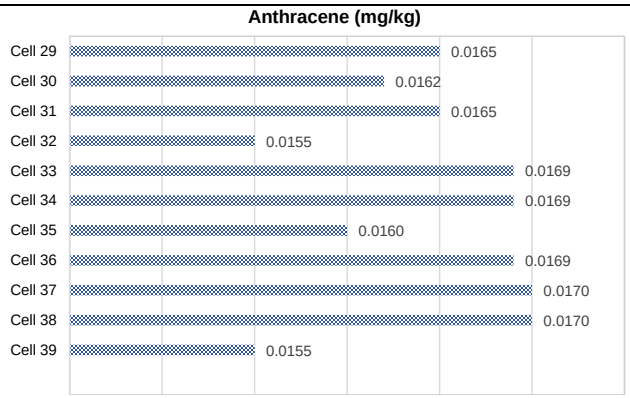


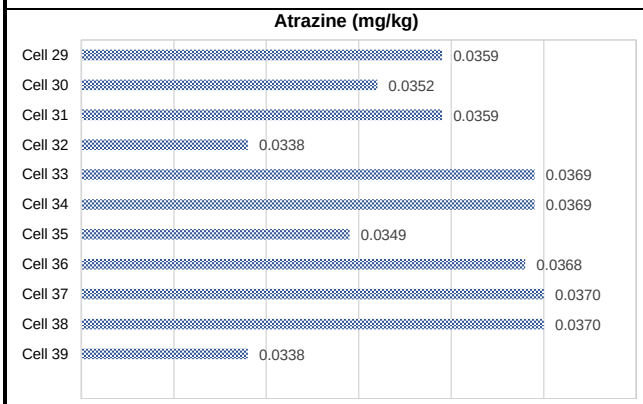


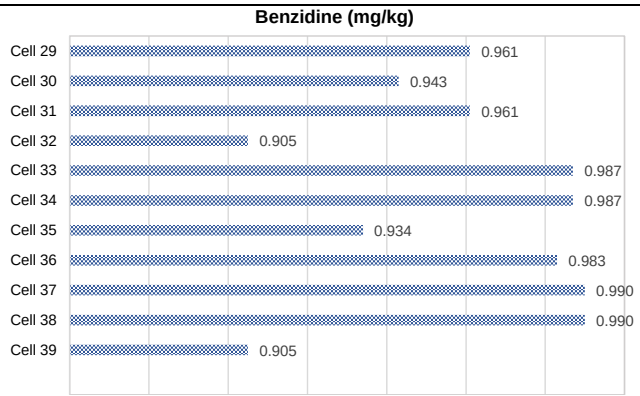










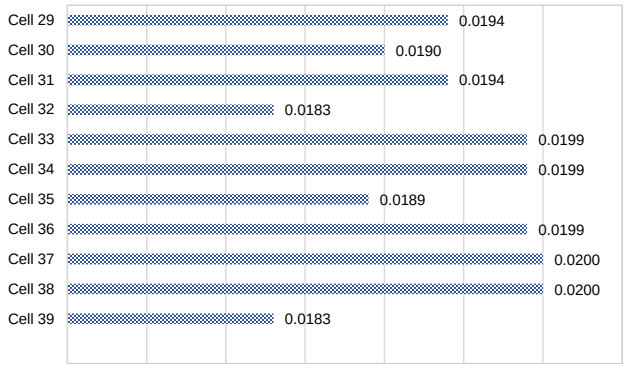


Abbreviations:
mg/kg = milligrams per kilogram SVOCs = semivolatile organic compounds

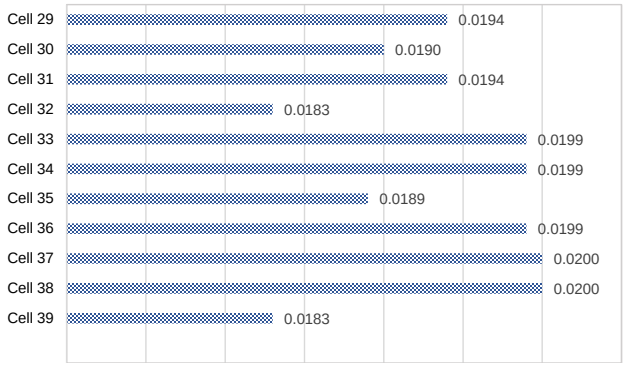
Notes:
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C-8	**Background Soil Concentration Bar Charts - SVOCs** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

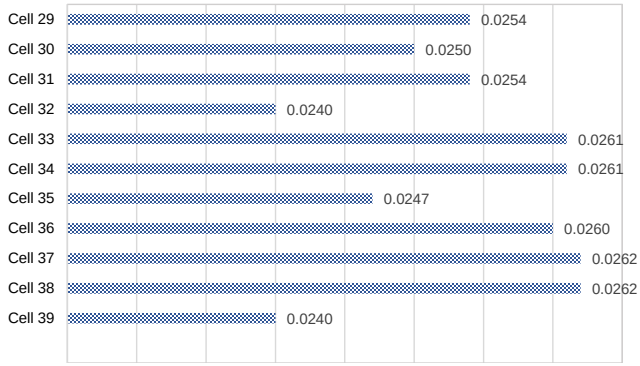
Benzo(a)anthracene (mg/kg)



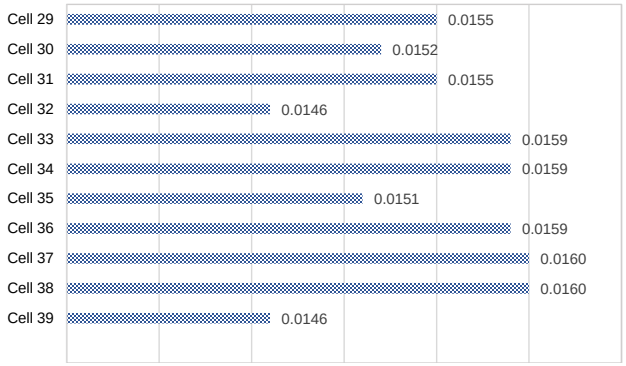
Benzo(a)pyrene (mg/kg)



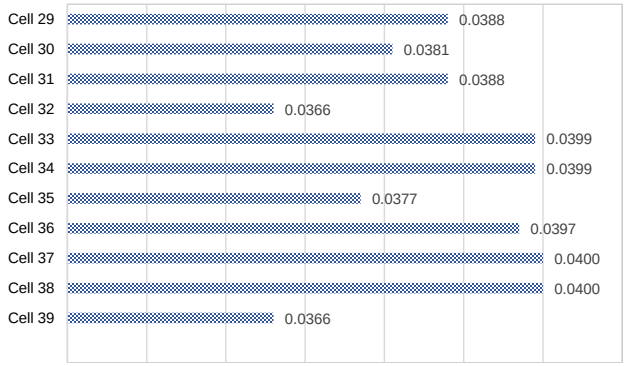
Benzo(b)fluoranthene (mg/kg)



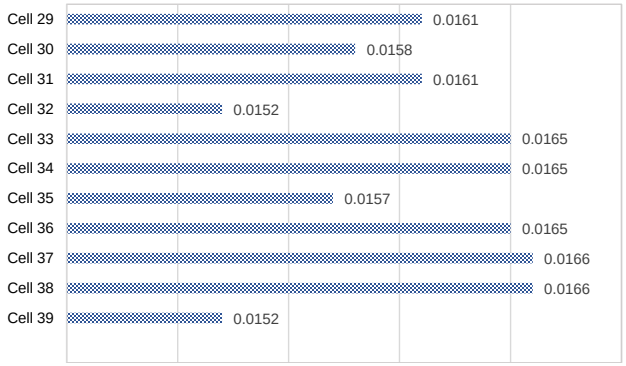
Benzo(g,h,i)perylene (mg/kg)



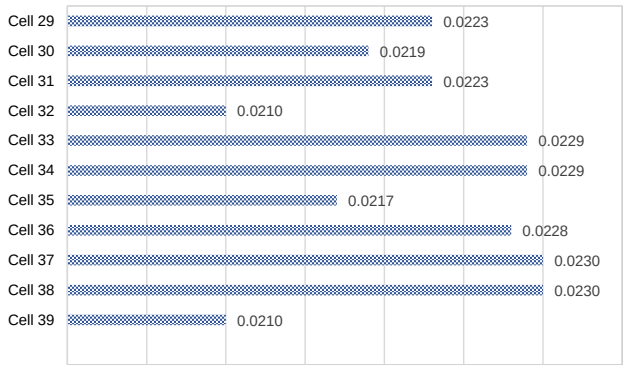
Benzo(k)fluoranthene (mg/kg)



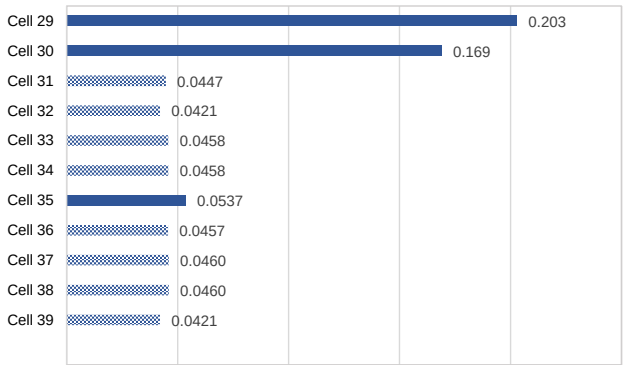
Bis(2-chloroethyl)ether (mg/kg)



Bis(2-chloroisopropyl)ether (mg/kg)



Bis(2-ethylhexyl)phthalate (mg/kg)



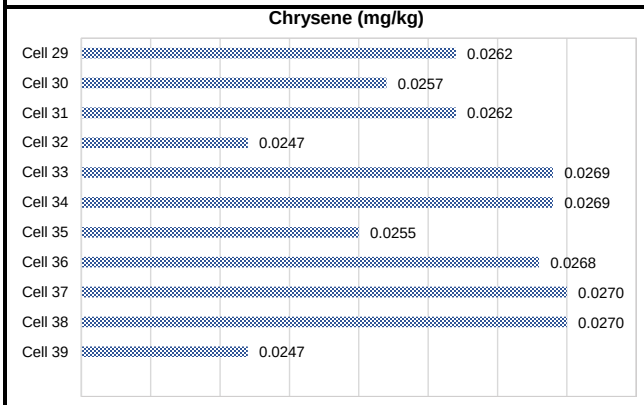
Abbreviations:
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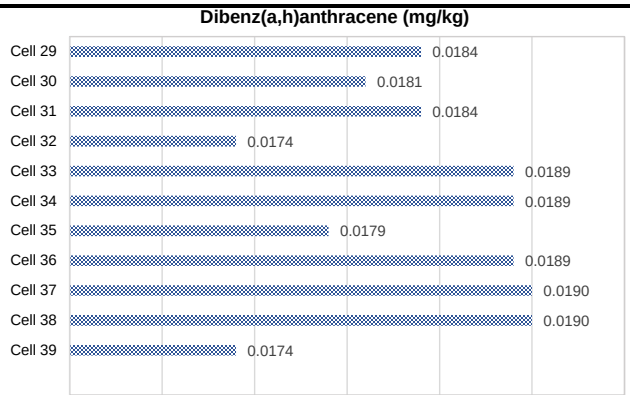
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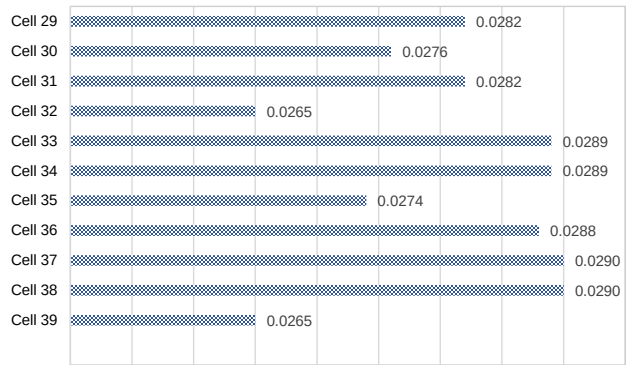
C-9

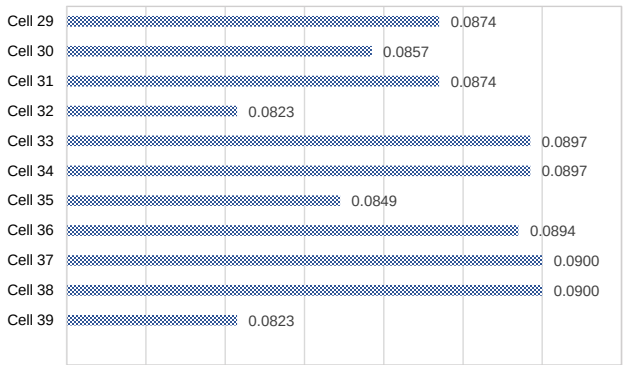
Background Soil Concentration Bar Charts - SVOCs
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility
Lea County, New Mexico

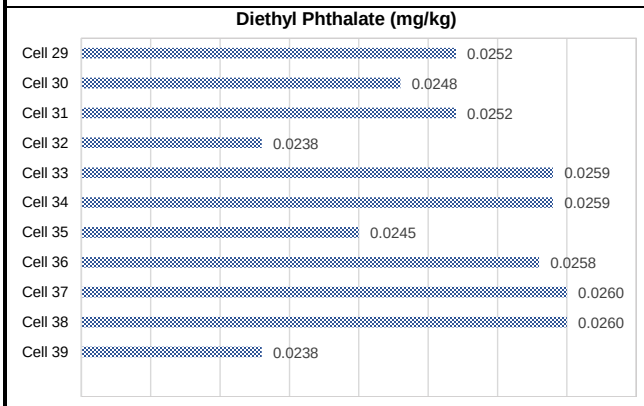
ARCADIS

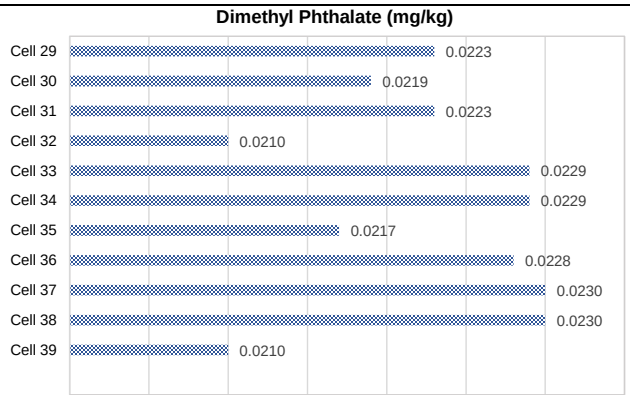


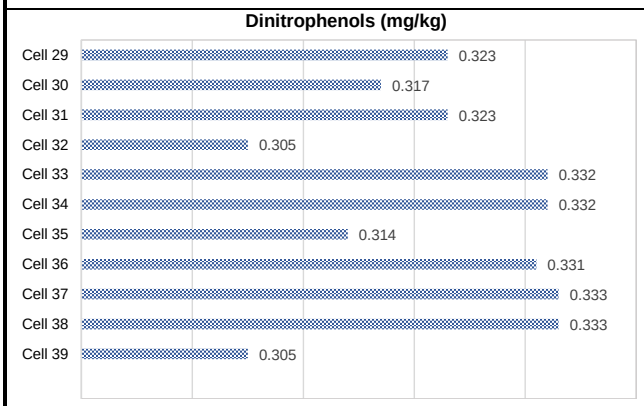


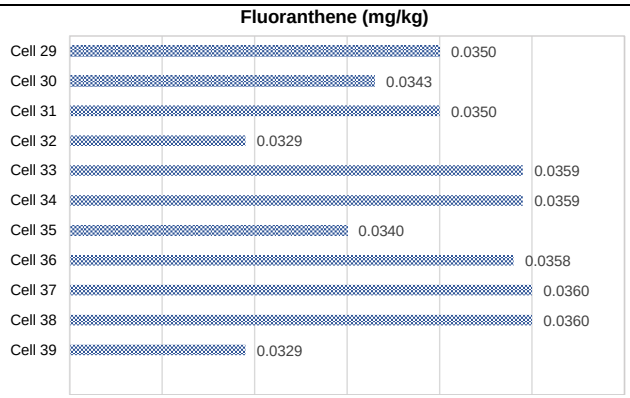










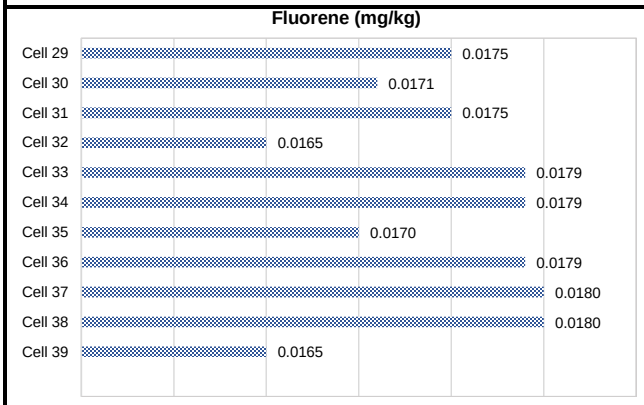


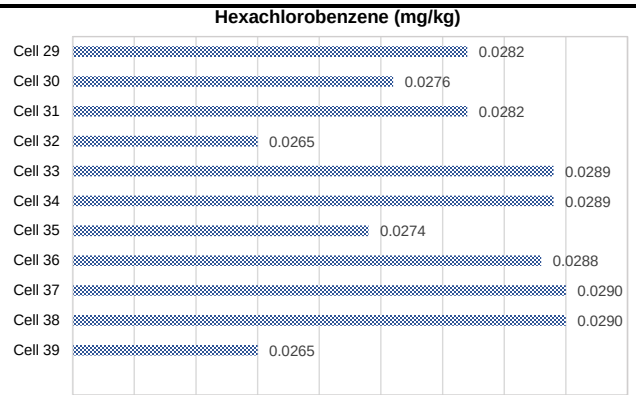
Abbreviations:
mg/kg = milligrams per kilogram SVOCs = semivolatile organic compounds
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

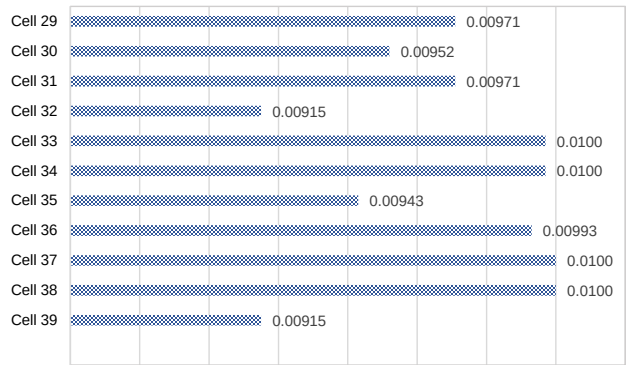
C-10

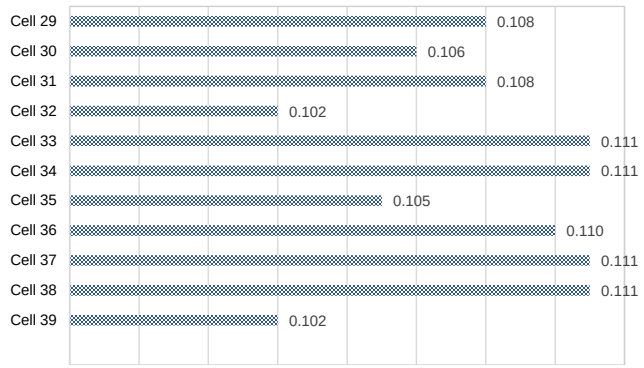
Background Soil Concentration Bar Charts - SVOCs
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility
Lea County, New Mexico

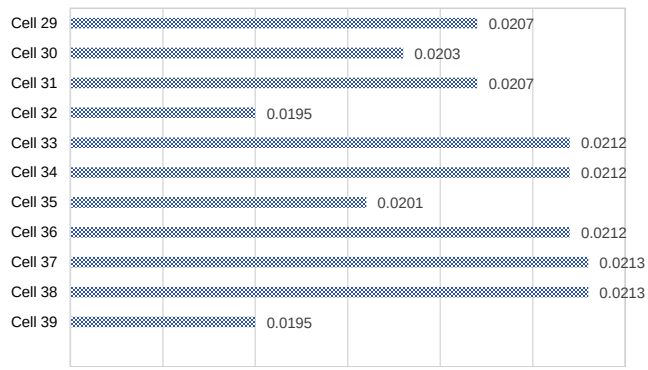
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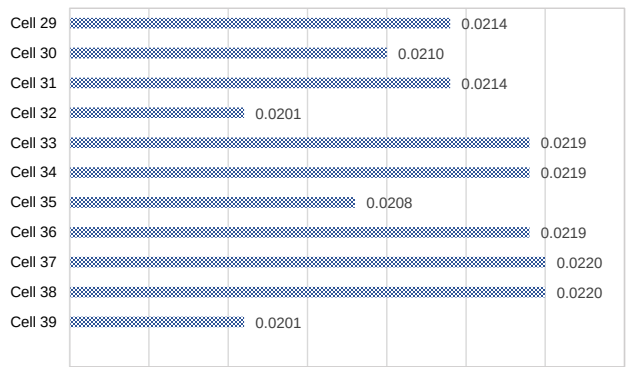


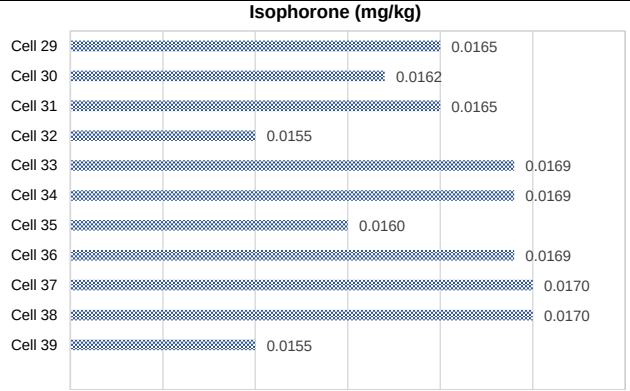


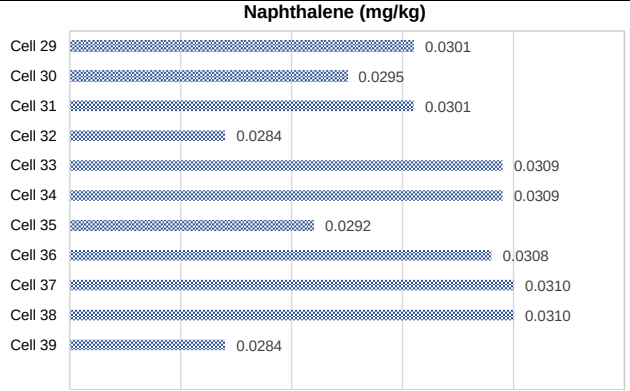












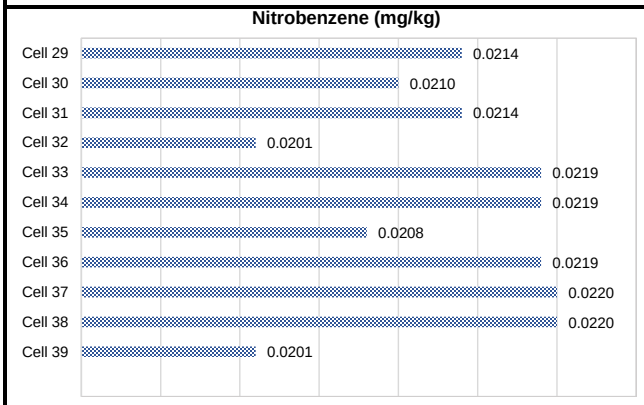
Abbreviations:
mg/kg = milligrams per kilogram SVOCs = semivolatile organic compounds

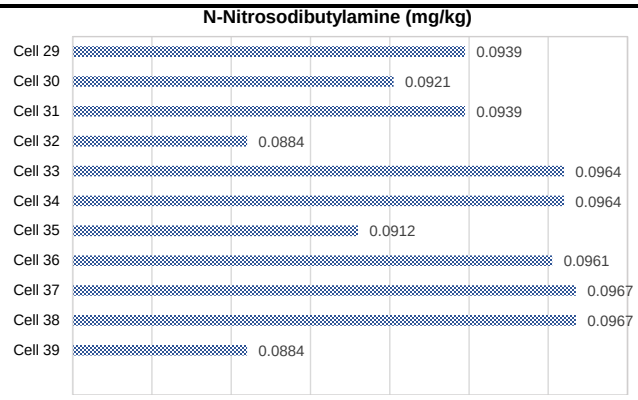
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

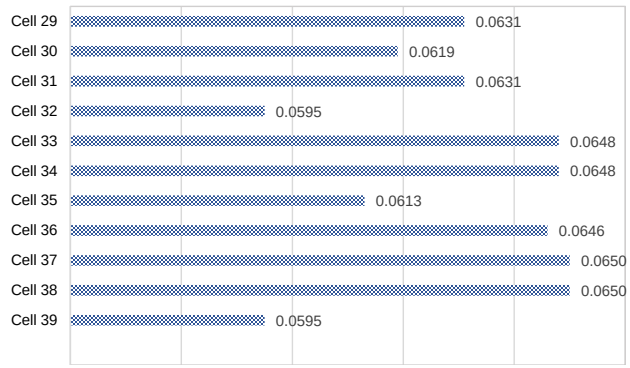
C-11

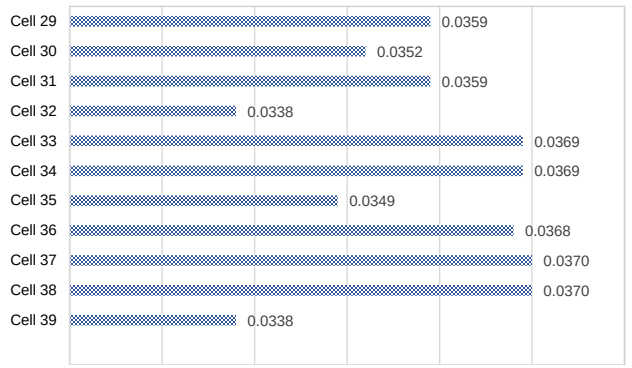
Background Soil Concentration Bar Charts - SVOCs
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility
Lea County, New Mexico

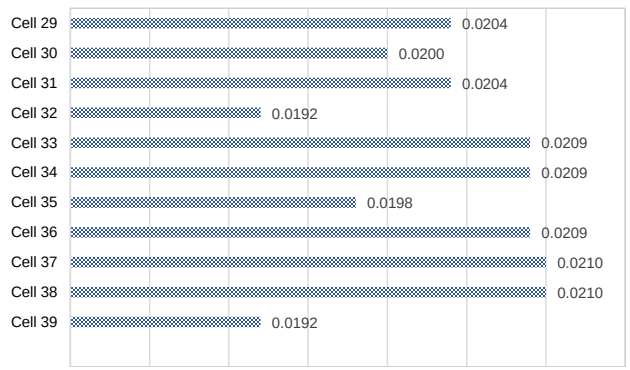
ARCADIS

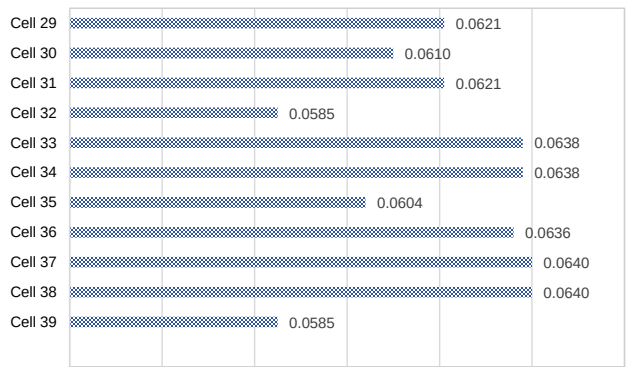


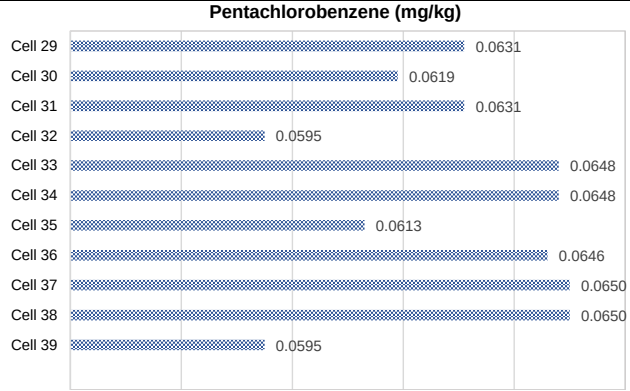


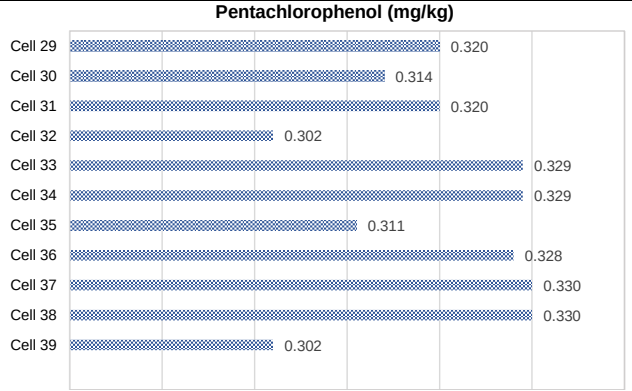








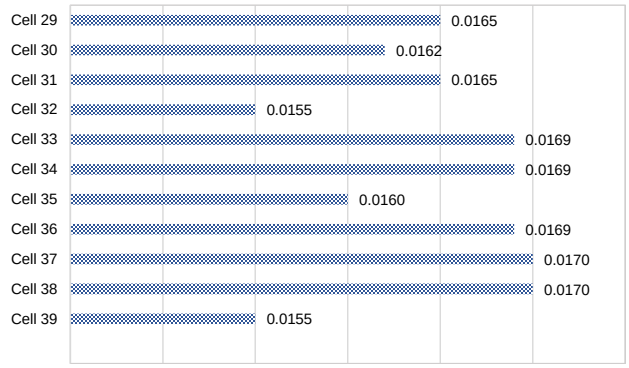


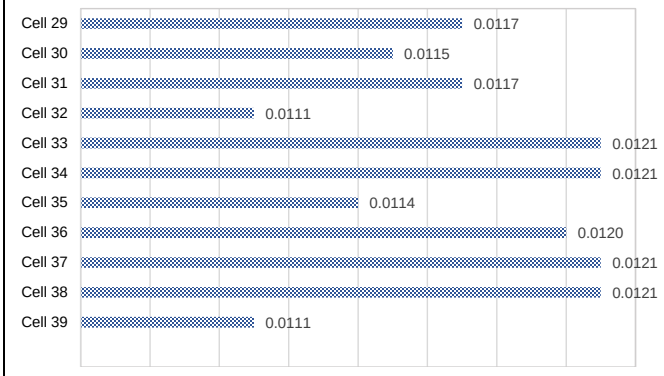


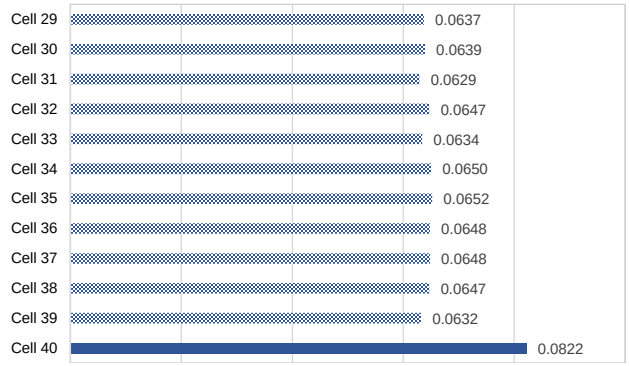
Abbreviations:
mg/kg = milligrams per kilogram SVOCs = semivolatile organic compounds

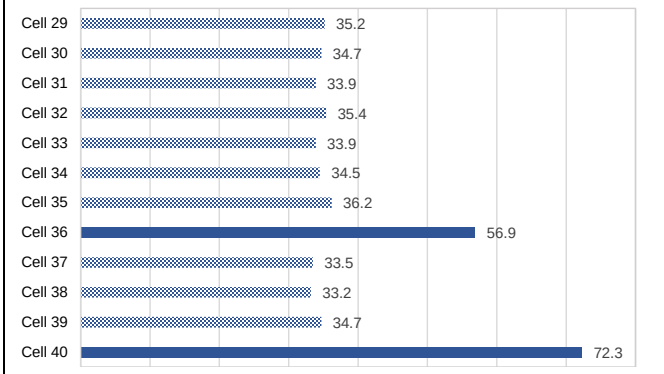
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

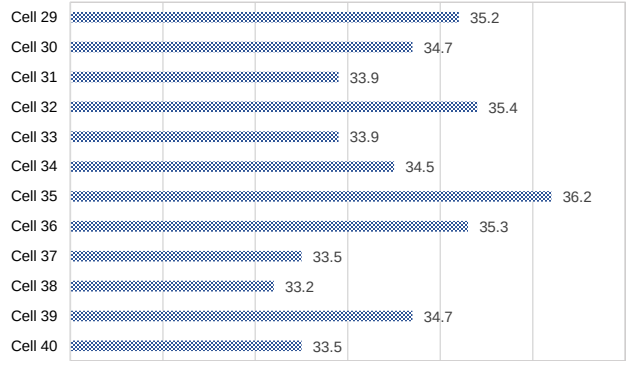
C-12	**Background Soil Concentration Bar Charts - SVOCs, TPHs, and Organochlorine Pesticides** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

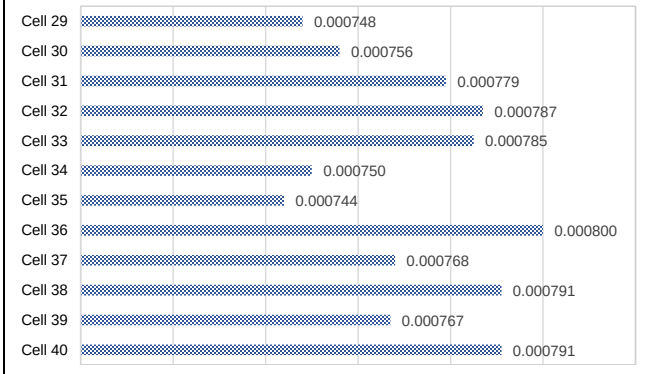


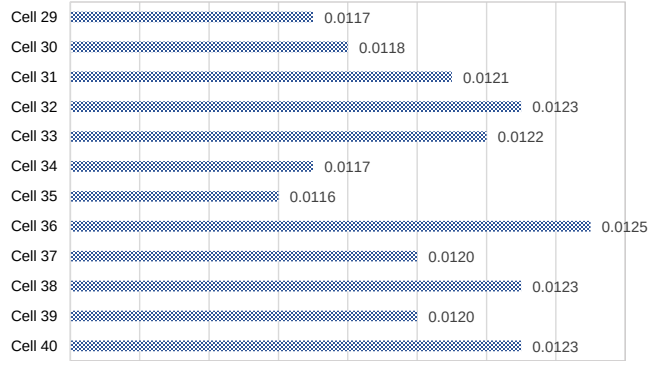


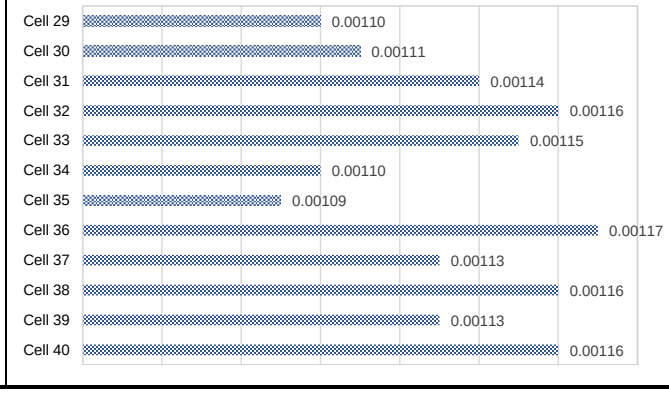












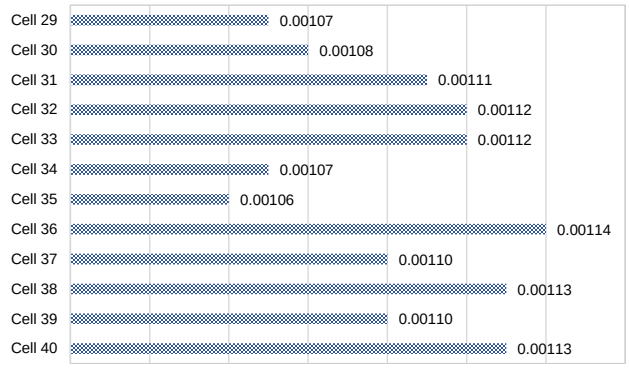
Abbreviations:

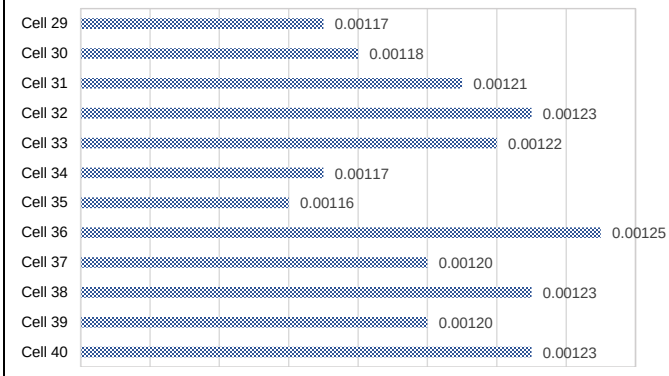
DRO = diesel range organics
GRO = gasoline range organics
mg/kg = milligrams per kilogram
ORO = oil range organics
SVOCs = semivolatile organic compounds
TPH = total petroleum hydrocarbons

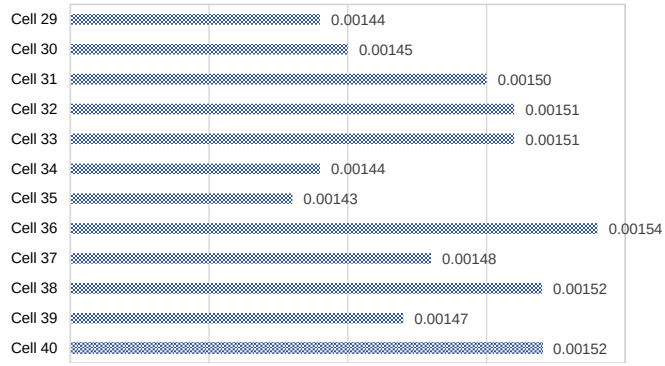
Notes:

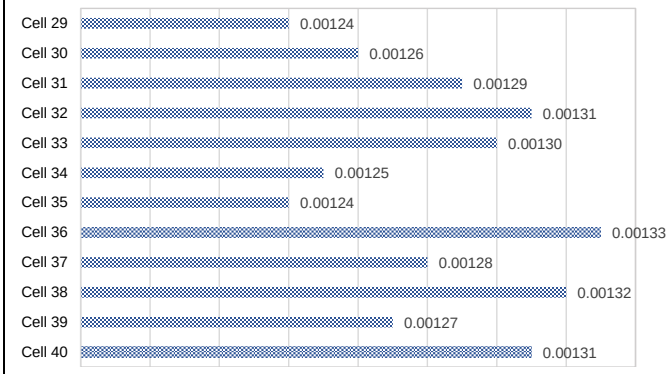
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

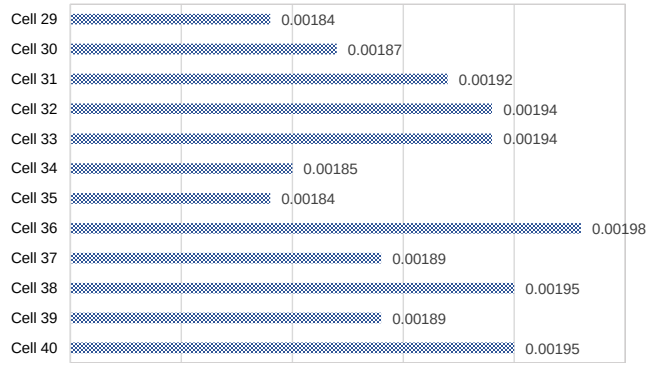
C-13	**Background Soil Concentration Bar Charts - Organochlorine Pesticides** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

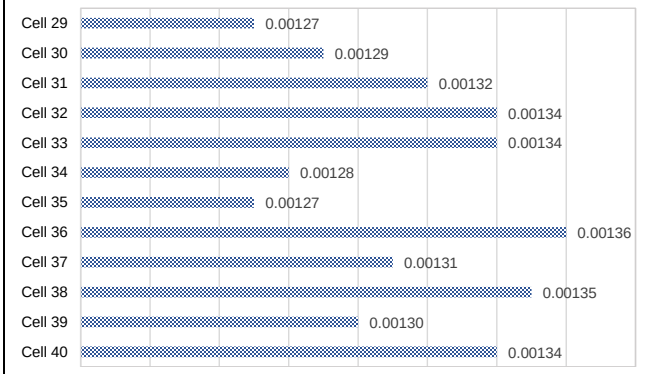


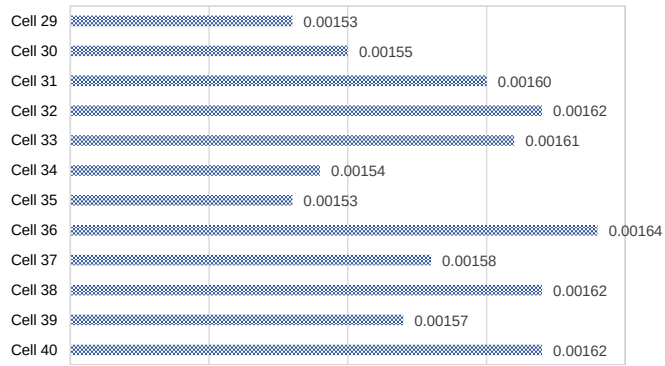


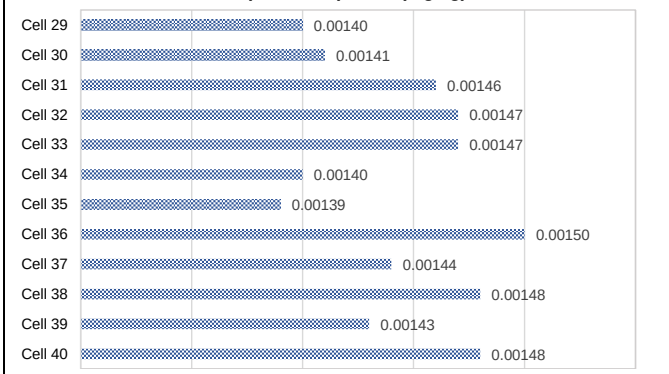








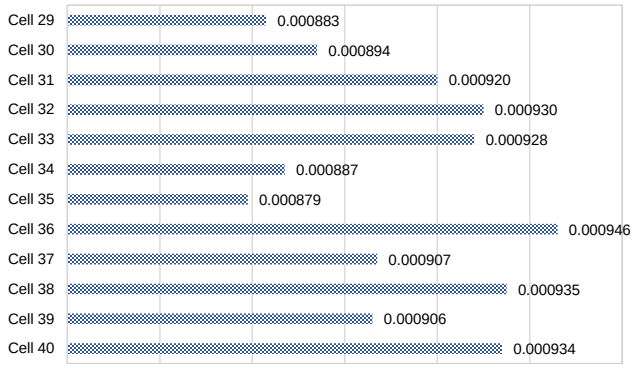




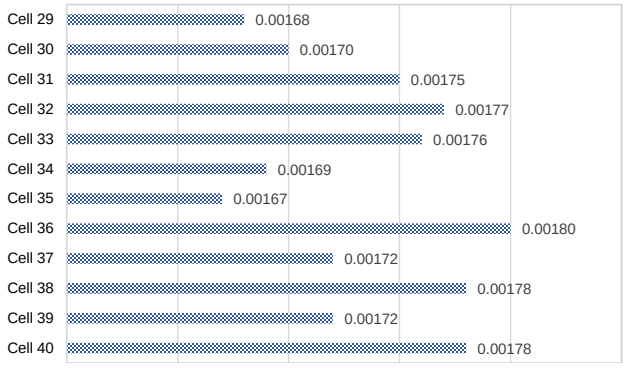
Abbreviations:
mg/kg = milligrams per kilogram
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

C-14	**Background Soil Concentration Bar Charts - Organochlorine Pesticides & PCBs** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

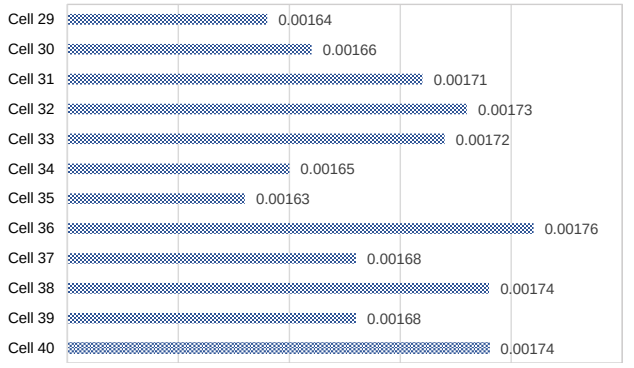
Hexachlorocyclohexane, alpha- (mg/kg)



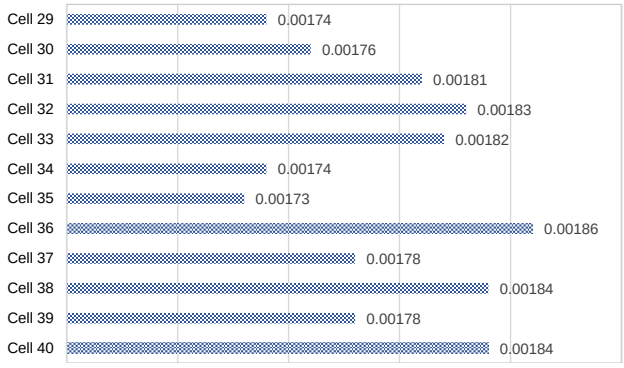
Hexachlorocyclohexane, beta- (mg/kg)



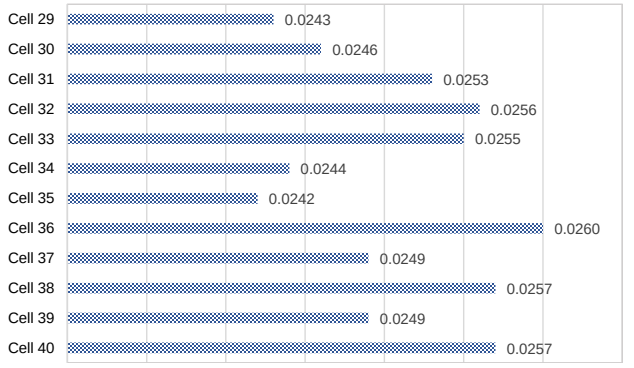
Hexachlorocyclohexane, delta- (mg/kg)



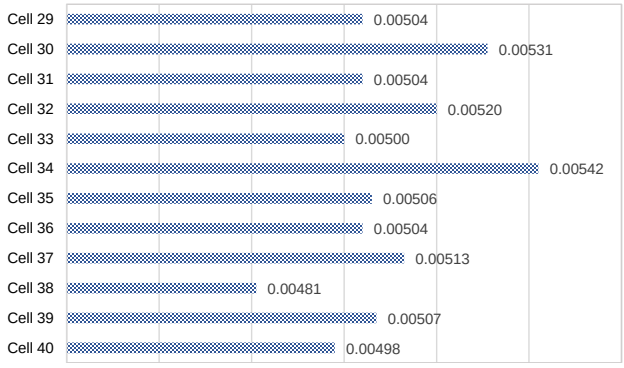
Hexachlorocyclohexane, gamma- (mg/kg)



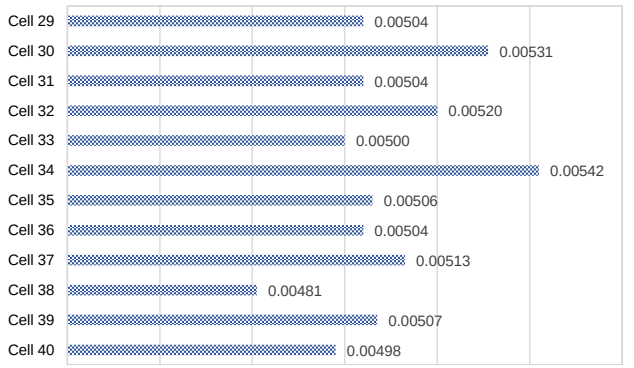
Toxaphene (mg/kg)



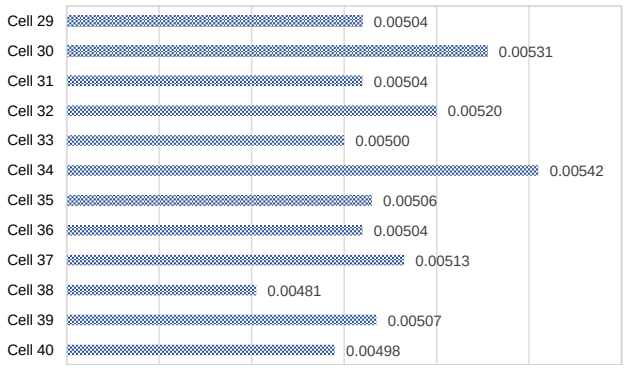
Aroclor 1016 (mg/kg)



Aroclor 1221 (mg/kg)



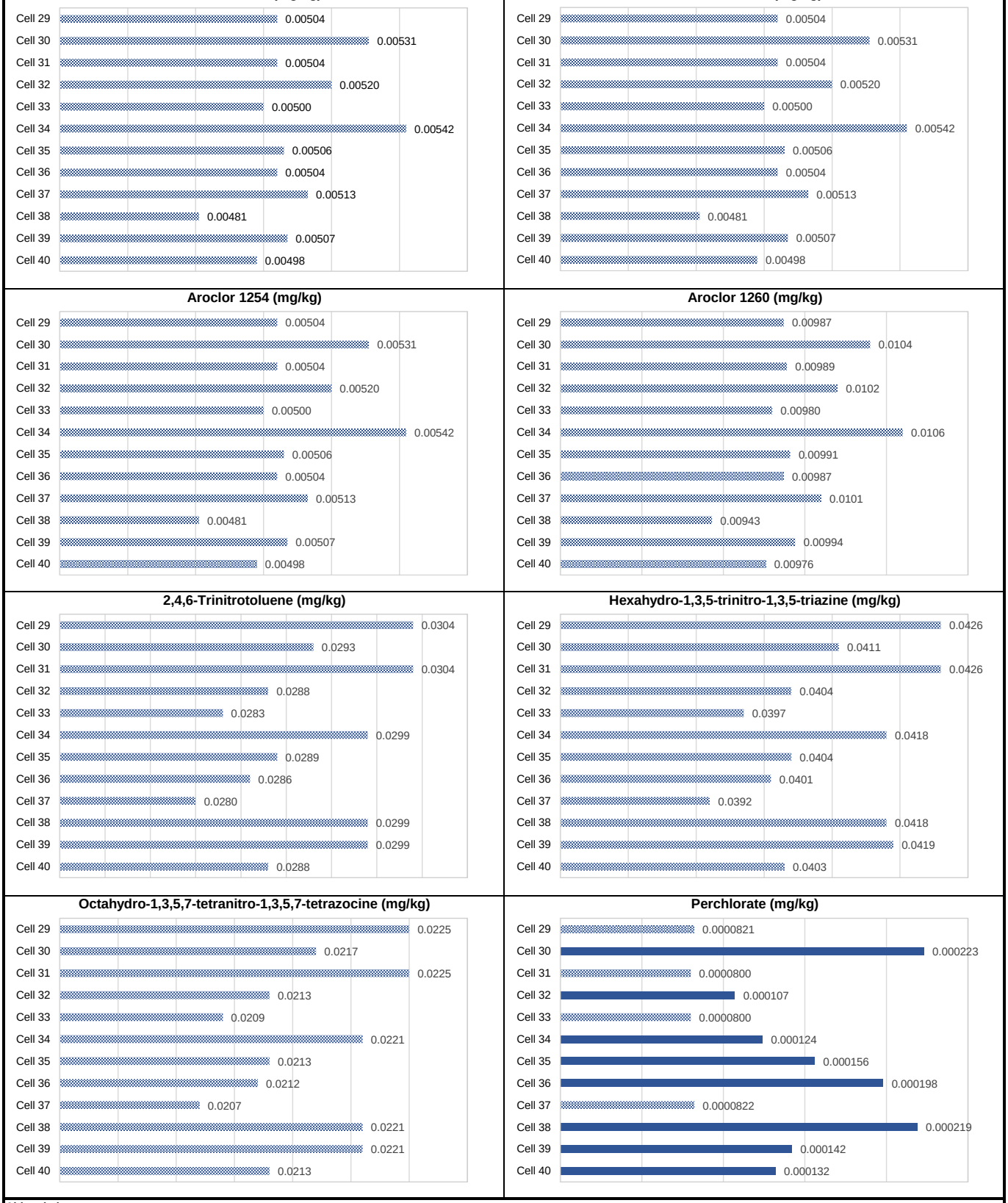
Aroclor 1232 (mg/kg)



Abbreviations:
mg/kg = milligrams per kilogram PCBs = polychlorinated biphenyls

Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

C-15	**Background Soil Concentration Bar Charts - PCBs, Nitroaromatics & Nitramines, and Perchlorate** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

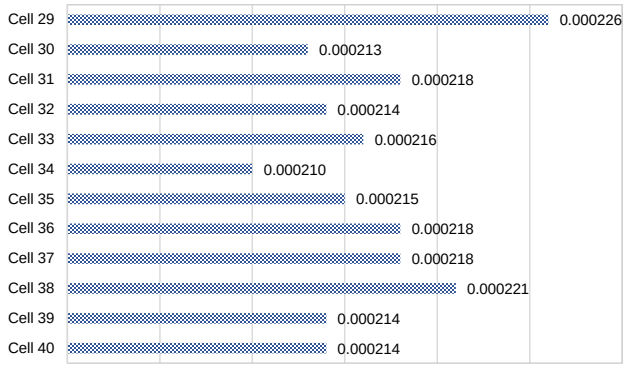


Abbreviations:
mg/kg = milligrams per kilogram PCBs = polychlorinated biphenyls

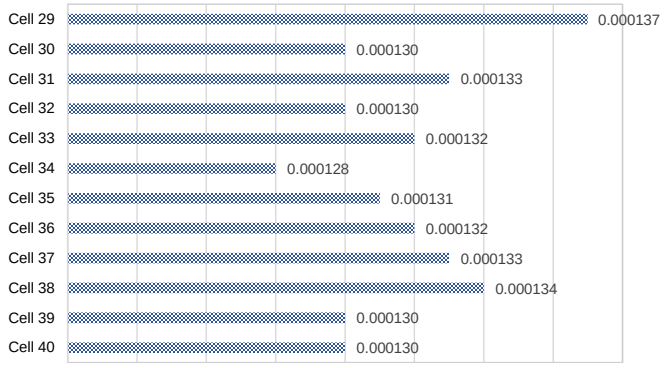
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

C-16	**Background Soil Concentration Bar Charts - Fluorinated Alkyl Substances and Metals** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

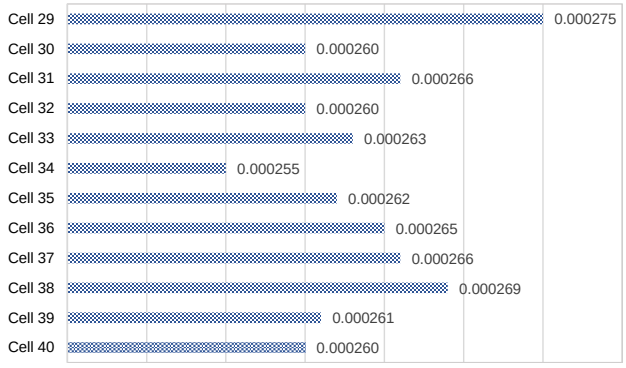
Perfluorooctanoic acid (PFOA) (mg/kg)



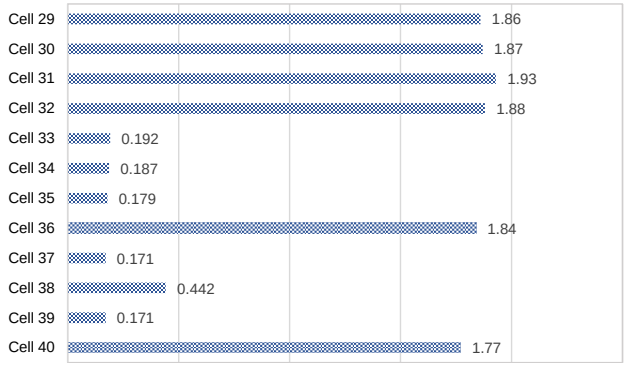
Perfluorooctanesulfonic acid (PFOS) (mg/kg)



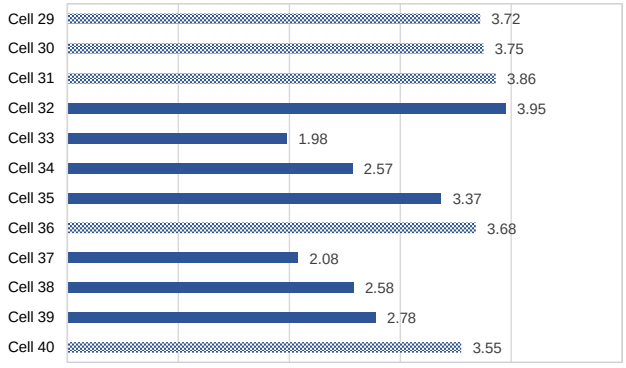
Perfluorohexanesulfonic acid (PFHxS) (mg/kg)



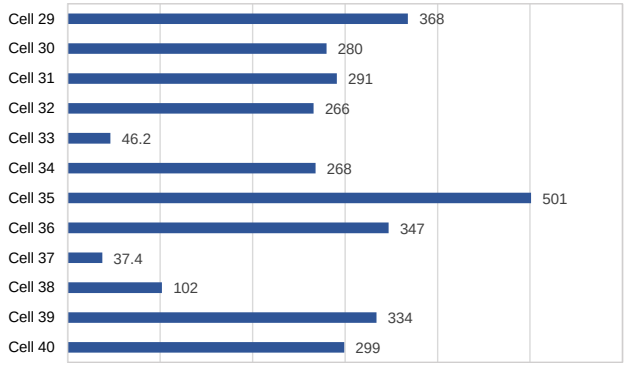
Antimony (mg/kg)



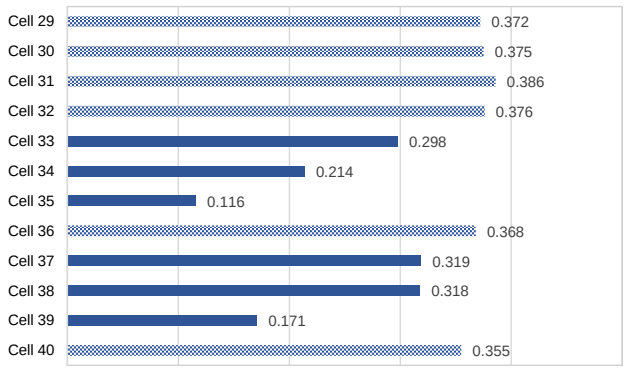
Arsenic (mg/kg)



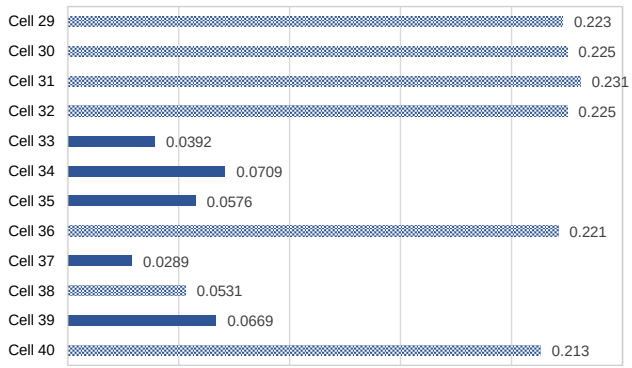
Barium (mg/kg)



Beryllium (mg/kg)

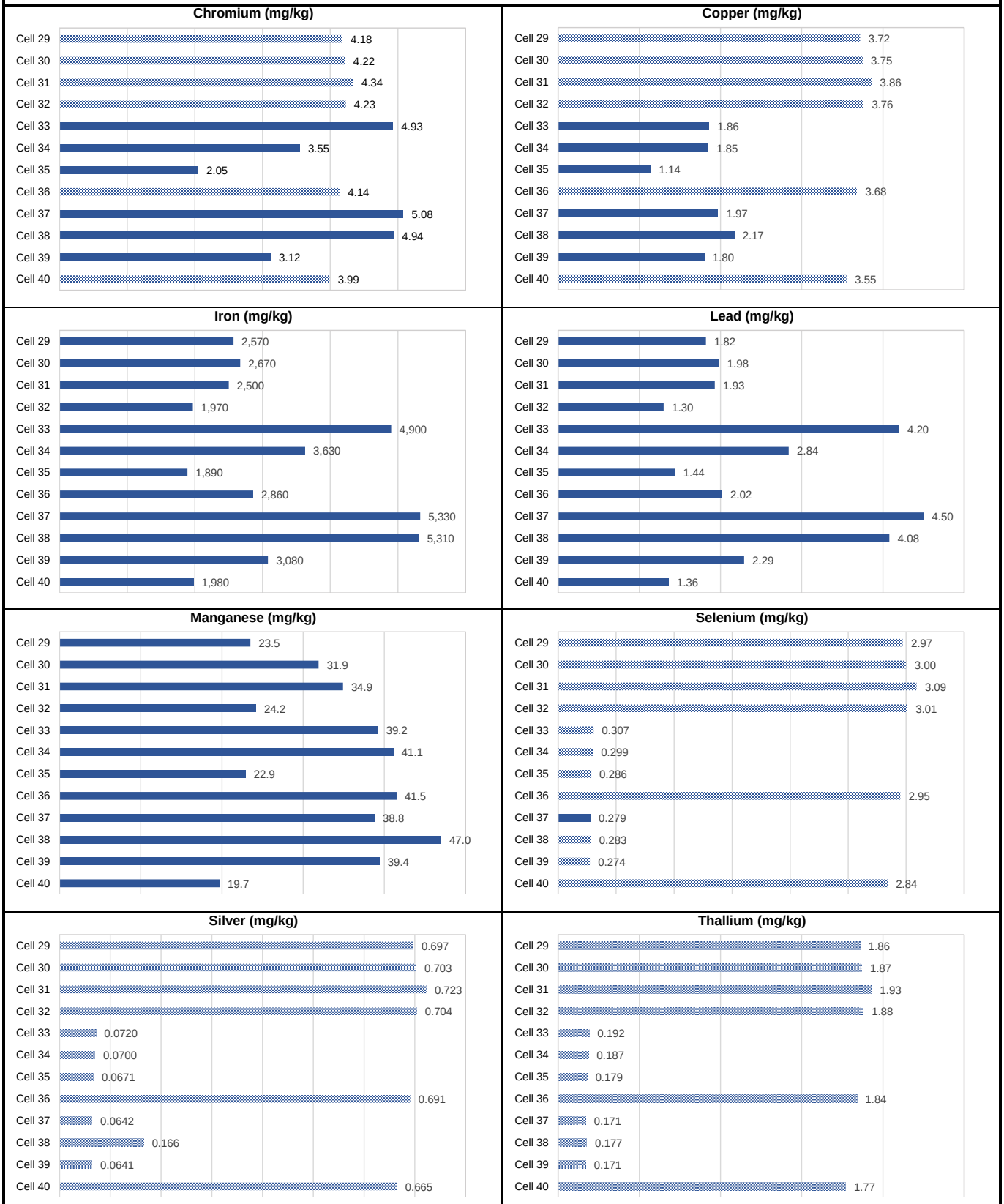


Cadmium (mg/kg)



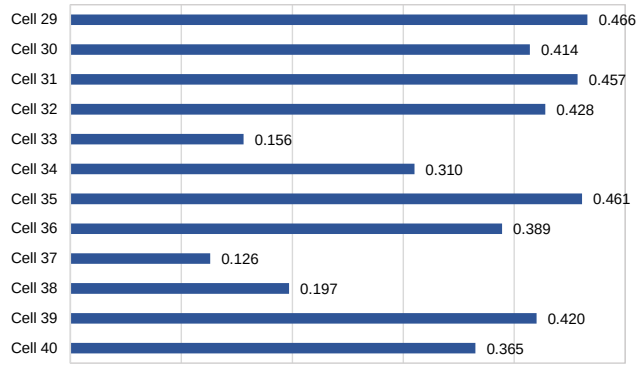
Abbreviations:
mg/kg = milligrams per kilogram
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

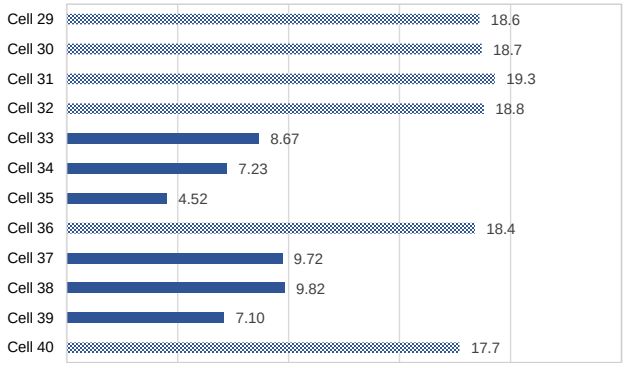
C-17	**Background Soil Concentration Bar Charts - Metals** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

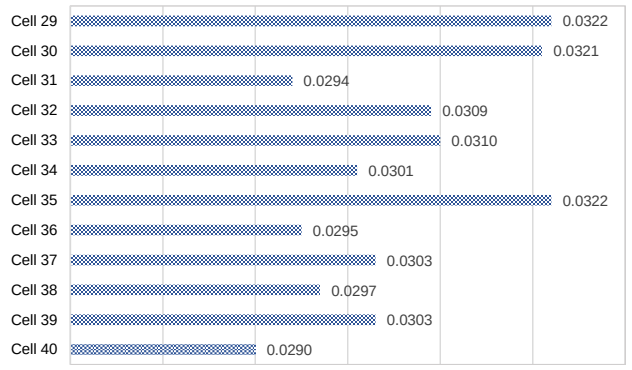


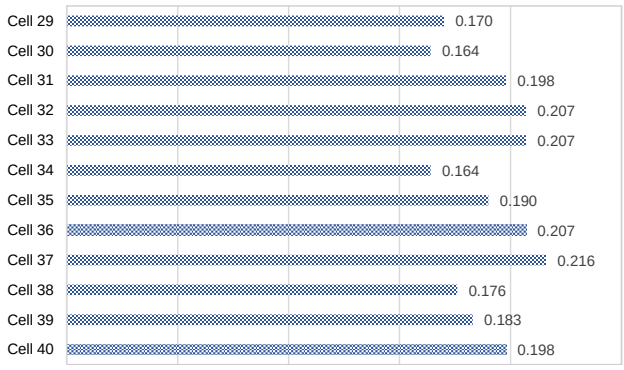
Abbreviations:
mg/kg = milligrams per kilogram
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

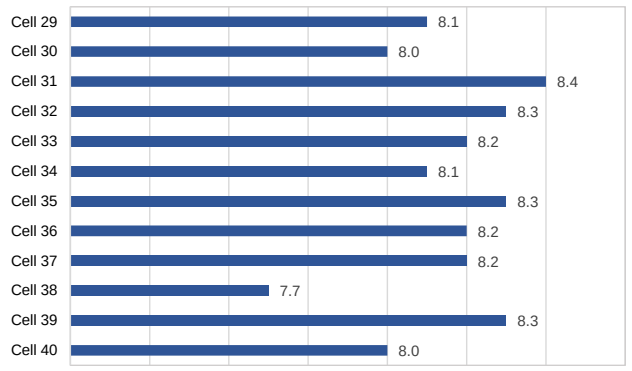
C-18	**Background Soil Concentration Bar Charts - Metals, Mercury, and General Chemistry** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

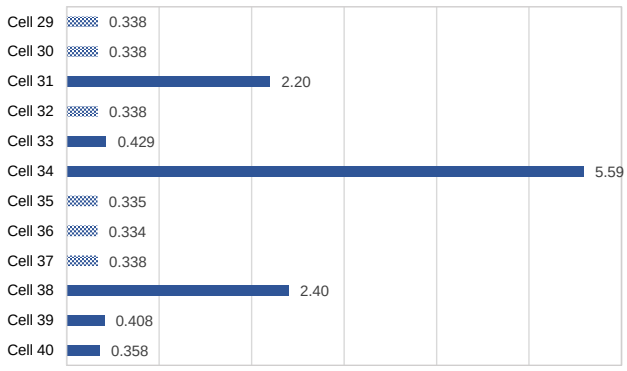


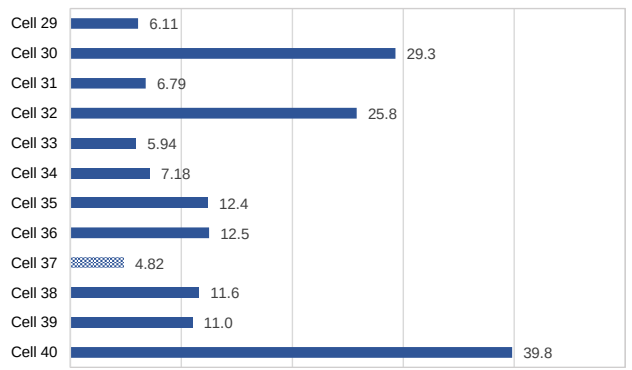


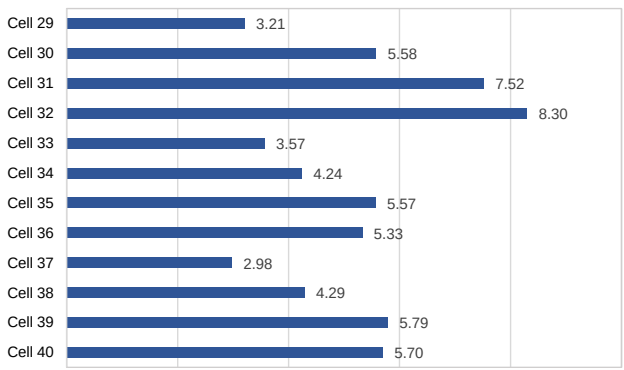








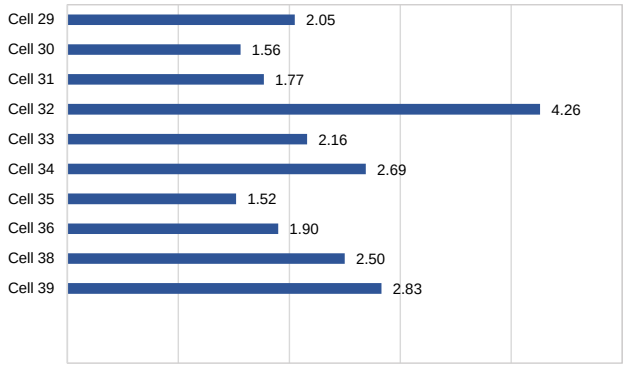




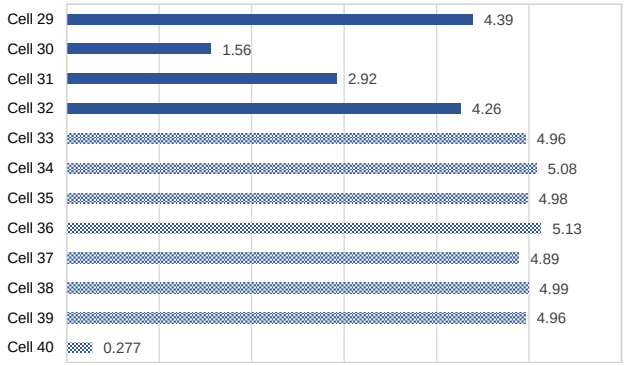
Abbreviations:
mg/kg = milligrams per kilogram
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

C-19	**Background Soil Concentration Bar Charts - General Chemistry, and Radium-226 & Other Gamma Emitters** Chevron Environmental Management Company (CEMC) Jal Landfarm NM-02-001 Centralized Surface Waste Management Facility Lea County, New Mexico	ARCADIS

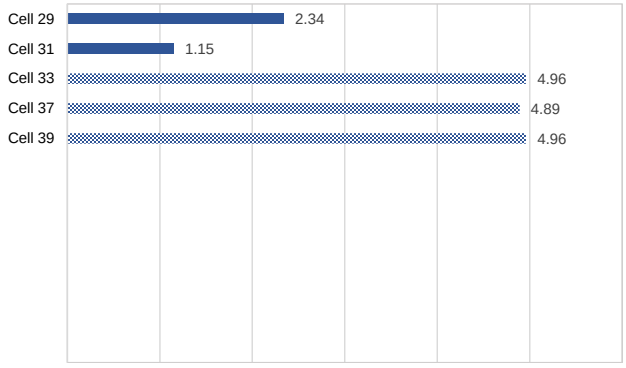
Nitrate as N (mg/kg)



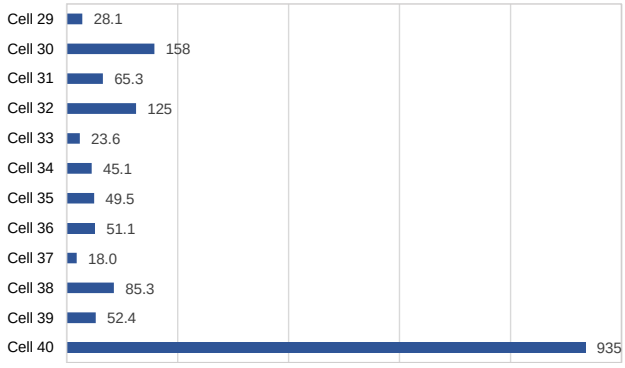
Nitrate Nitrite as N (mg/kg)



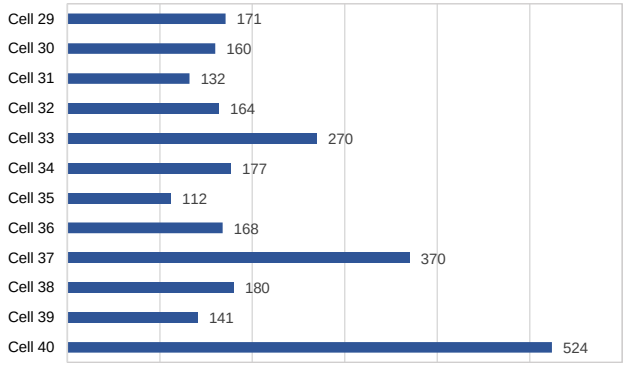
Nitrite as N (mg/kg)



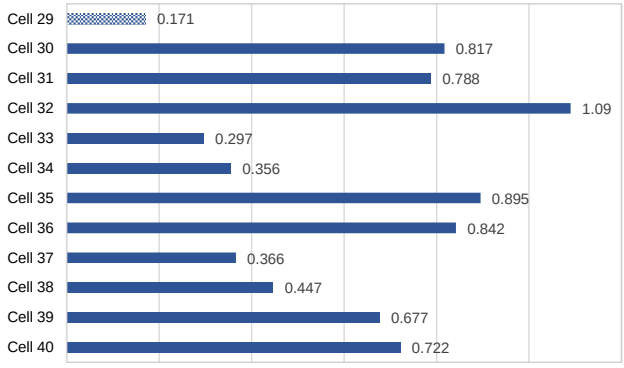
Sulfate (mg/kg)



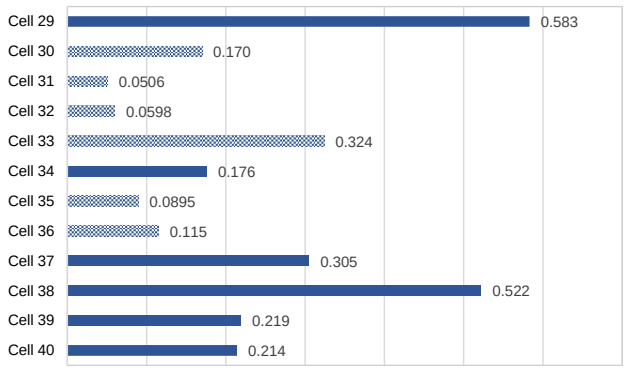
Total Dissolved Solids (mg/L)



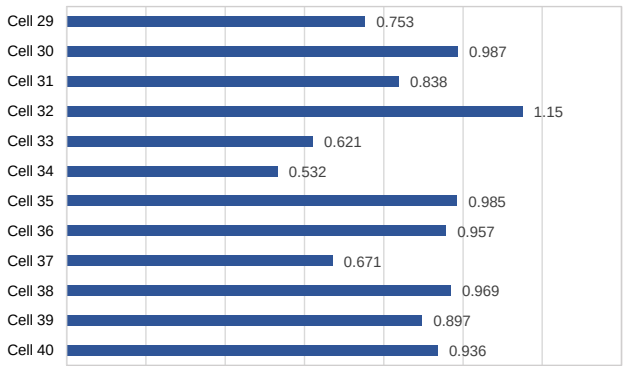
Radium-226 (pCi/g)



Radium-228 (pCi/g)



Combined Radium 226/228 (pCi/g)



Abbreviations:
mg/kg = milligrams per kilogram
Notes:
1. Detections are presented with full data bars. Non-detections are shown with pattern data bars. Non-detections are presented with their associated method detection limit (MDL).

Appendix D

ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics

Received by OCD: 5/5/2022 7:41:01 AM

Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000491	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000499	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000491	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000497	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000501	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000500	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000498	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000499	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000490	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000499	0	U	mg/kg
VOCs - 1,1,1-Trichloroethane	VOCs	1,1,1-Trichloroethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000500	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000373	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000379	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000373	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000424	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000378	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000381	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000380	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000378	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000379	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000373	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000379	0	U	mg/kg
VOCs - 1,1,2,2-Tetrachloroethane	VOCs	1,1,2,2-Tetrachloroethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000380	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000491	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000499	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000491	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000497	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000501	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000500	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000498	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000499	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000490	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000499	0	U	mg/kg
VOCs - 1,1,2-Trichloroethane	VOCs	1,1,2-Trichloroethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000500	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000580	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000589	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000580	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000658	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000586	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000591	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000590	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000588	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000589	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000578	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000589	0	U	mg/kg
VOCs - 1,1-Dichloroethane	VOCs	1,1-Dichloroethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000590	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000491	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000499	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000491	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000497	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000501	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000500	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000498	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000499	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000490	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000499	0	U	mg/kg
VOCs - 1,1-Dichloroethylene	VOCs	1,1-Dichloroethylene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000500	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000511	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000519	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000511	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000580	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000517	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000521	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000520	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000518	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000519	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000510	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000519	0	U	mg/kg
VOCs - 1,1-Dichloropropene	VOCs	1,1-Dichloropropene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000520	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000953	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000968	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000953	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00108	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000964	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000972	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000970	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000966	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000968	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000951	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000968	0	U	mg/kg
VOCs - 1,2,4-Trichlorobenzene	VOCs	1,2,4-Trichlorobenzene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000970	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000295	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000299	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000295	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000335	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000298	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000301	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000300	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000299	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000299	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000294	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000299	0	U	mg/kg
VOCs - 1,2-Dibromoethane	VOCs	1,2-Dibromoethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000300	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000246	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000250	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000246	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000279	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000249	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000251	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000250	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000249	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000250	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000245	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000250	0	U	mg/kg
VOCs - 1,2-Dichlorobenzene	VOCs	1,2-Dichlorobenzene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000250	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000511	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000519	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000511	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000580	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000517	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000521	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000520	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000518	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000519	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000510	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000519	0	U	mg/kg
VOCs - 1,2-Dichloroethane	VOCs	1,2-Dichloroethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000520	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000491	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000499	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000491	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000497	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000501	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000500	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000498	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000499	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000490	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000499	0	U	mg/kg
VOCs - 1,2-Dichloropropane	VOCs	1,2-Dichloropropane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000500	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000305	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000309	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000305	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000346	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000308	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000311	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000310	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000309	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000309	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000304	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000309	0	U	mg/kg
VOCs - 1,3-Dichlorobenzene	VOCs	1,3-Dichlorobenzene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000310	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000511	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000519	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000511	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000580	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000517	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000521	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000520	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000518	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000519	0	U	mg/kg

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Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS Design & consultancy for natural and built assets

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000510	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000519	0	U	mg/kg
VOCs - 1,3-Dichloropropene, Total	VOCs	1,3-Dichloropropene, Total	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000520	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000314	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000319	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000314	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000357	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000318	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000321	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000320	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000319	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000319	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000314	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000319	0	U	mg/kg
VOCs - 1,4-Dichlorobenzene	VOCs	1,4-Dichlorobenzene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000320	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0187	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0190	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0187	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0212	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0189	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0190	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0190	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0189	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0190	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0186	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0190	0	U	mg/kg
VOCs - 1,4-Dioxane	VOCs	1,4-Dioxane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.0190	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00845	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00858	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00845	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00960	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00855	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00862	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00860	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00857	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00858	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00843	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00858	0	U	mg/kg
VOCs - Acrolein	VOCs	Acrolein	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00860	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00354	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00359	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00354	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00402	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00358	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00361	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00360	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00359	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00359	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00353	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00359	0	U	mg/kg
VOCs - Acrylonitrile	VOCs	Acrylonitrile	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00360	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000619	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000629	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000619	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000703	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000626	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000631	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000630	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000627	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000629	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000618	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000629	0	U	mg/kg
VOCs - Benzene	VOCs	Benzene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000630	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000196	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000200	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000196	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000223	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000199	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000200	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000200	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000199	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000200	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000196	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000200	0	U	mg/kg
VOCs - Bromodichloromethane	VOCs	Bromodichloromethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000200	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00108	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00110	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00108	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00123	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00109	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00110	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00110	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00110	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00110	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00108	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00110	0	U	mg/kg
VOCs - Bromomethane	VOCs	Bromomethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00110	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000501	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000509	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000501	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000569	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000507	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000511	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000510	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000508	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000509	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000500	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000509	0	U	mg/kg
VOCs - Carbon tetrachloride	VOCs	Carbon tetrachloride	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000510	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000855	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000868	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000855	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000971	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000865	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000872	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000870	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000867	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000868	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000853	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000868	0	U	mg/kg
VOCs - Chloroform	VOCs	Chloroform	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000870	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00118	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00120	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00118	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00134	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00119	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00120	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00120	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00120	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00120	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00118	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00120	0	U	mg/kg
VOCs - Chloromethane	VOCs	Chloromethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00120	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000560	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000569	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000560	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000636	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000567	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000571	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000570	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000568	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000569	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000559	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000569	0	U	mg/kg
VOCs - cis-1,2-Dichloroethene	VOCs	cis-1,2-Dichloroethene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000570	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000442	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000449	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000442	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000502	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000447	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000451	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000450	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000448	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000449	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000441	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000449	0	U	mg/kg
VOCs - cis-1,3-Dichloropropene	VOCs	cis-1,3-Dichloropropene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000450	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000717	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000729	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000717	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000815	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000726	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000731	0	U	mg/kg

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Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS Design & consultancy for natural and built assets

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000730	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000727	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000729	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000716	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000729	0	U	mg/kg
VOCs - Dichlorodifluoromethane	VOCs	Dichlorodifluoromethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000730	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000442	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000449	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000442	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000502	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000447	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000451	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000450	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000448	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000449	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000441	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000449	0	U	mg/kg
VOCs - Ethylbenzene	VOCs	Ethylbenzene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000450	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000599	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000609	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000599	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000681	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000606	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000611	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000610	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000608	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000609	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000598	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000609	0	U	mg/kg
VOCs - Methyl tert-butyl ether (MTBE)	VOCs	Methyl tert-butyl ether (MTBE)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000610	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00491	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00499	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00491	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00558	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00497	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00501	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00500	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00498	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00499	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00490	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00499	0	U	mg/kg
VOCs - Methylene Chloride	VOCs	Methylene Chloride	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00500	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000295	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000299	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000295	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000335	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000298	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000301	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000300	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000299	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000299	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000294	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000299	0	U	mg/kg
VOCs - Monochlorobenzene	VOCs	Monochlorobenzene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000300	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000295	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000299	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000295	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000335	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000298	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000301	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000300	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000299	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000299	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000294	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000299	0	U	mg/kg
VOCs - Styrene	VOCs	Styrene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000300	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000727	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000739	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000727	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000826	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000736	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000741	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000740	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000737	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000739	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000725	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000739	0	U	mg/kg
VOCs - Tetrachloroethylene (PCE)	VOCs	Tetrachloroethylene (PCE)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000740	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000884	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000898	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000884	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00100	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000895	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000902	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000900	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000896	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000898	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000882	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000898	0	U	mg/kg
VOCs - Toluene	VOCs	Toluene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000900	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000491	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000499	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000491	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000497	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000501	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000500	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000498	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000499	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000490	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000499	0	U	mg/kg
VOCs - trans-1,2-Dichloroethene	VOCs	trans-1,2-Dichloroethene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000500	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000511	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000519	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000511	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000580	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000517	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000521	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000520	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000518	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000519	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000510	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000519	0	U	mg/kg
VOCs - trans-1,3-Dichloropropene	VOCs	trans-1,3-Dichloropropene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000520	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000501	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000509	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000501	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000569	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000507	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000511	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000510	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000508	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000509	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000500	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000509	0	U	mg/kg
VOCs - Tribromomethane	VOCs	Tribromomethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000510	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000275	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000279	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000275	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000313	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000278	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000281	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000280	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000279	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000279	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000275	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000279	0	U	mg/kg
VOCs - Trichloroethylene (TCE)	VOCs	Trichloroethylene (TCE)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000280	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000491	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000499	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000491	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000497	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000501	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000500	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000498	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000499	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000490	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000499	0	U	mg/kg
VOCs - Trichlorofluoromethane	VOCs	Trichlorofluoromethane	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000500	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000589	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000599	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000589	0	U	mg/kg

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Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000670	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000596	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000601	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000600	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000598	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000599	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000588	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000599	0	U	mg/kg
VOCs - Vinyl chloride	VOCs	Vinyl chloride	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000600	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000491	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000499	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000491	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000558	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000497	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000501	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000500	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000498	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000499	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000490	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000499	0	U	mg/kg
VOCs - Xylenes, Total	VOCs	Xylenes, Total	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000500	0	U	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0118	0	U	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0119	0	U	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0120	0	U	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0119	0	U	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0119	0	U	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0119	0	U	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0119	0	U	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0117	0	UJ	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0120	0	U	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0118	0	U	mg/kg
Pesticides - Prometon	Pesticides	Prometon	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0118	0	U	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0476	0	UJ	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0467	0	UJ	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0476	0	UJ	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0448	0	UJ	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0488	0	UJ	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0488	0	U	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0462	0	UJ	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0487	0	UJ	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0490	0	UJ	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0490	0	UJ	mg/kg
SVOCs - 1,2,4,5-Tetrachlorobenzene	SVOCs	1,2,4,5-Tetrachlorobenzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0448	0	UJ	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0214	0	U	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0210	0	U	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0214	0	U	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0201	0	U	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0219	0	UJ	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0219	0	U	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0208	0	UJ	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0219	0	UJ	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0220	0	UJ	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0220	0	U	mg/kg
SVOCs - 1,2-Diphenylhydrazine	SVOCs	1,2-Diphenylhydrazine	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0201	0	U	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0109	0	U	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0107	0	U	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0109	0	U	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0102	0	U	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0112	0	UJ	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0112	0	U	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0106	0	UJ	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0111	0	UJ	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0112	0	UJ	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0112	0	UJ	mg/kg
SVOCs - 1-Methylnaphthalene	SVOCs	1-Methylnaphthalene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0102	0	UJ	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00971	0	U	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00952	0	U	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00971	0	U	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00915	0	U	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00997	0	UJ	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00997	0	U	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00943	0	UJ	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00993	0	UJ	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0100	0	UJ	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0100	0	UJ	mg/kg
SVOCs - 2,4,5-Trichlorophenol	SVOCs	2,4,5-Trichlorophenol	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00915	0	U	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00971	0	U	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00952	0	U	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00971	0	U	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00915	0	U	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00997	0	UJ	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00997	0	U	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00943	0	UJ	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00993	0	UJ	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0100	0	UJ	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0100	0	UJ	mg/kg
SVOCs - 2,4,6-Trichlorophenol	SVOCs	2,4,6-Trichlorophenol	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00915	0	U	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00971	0	UJ	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00952	0	UJ	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00971	0	UJ	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00915	0	UJ	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0100	0	UJ	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00997	0	UJ	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00943	0	UJ	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00993	0	UJ	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0100	0	UJ	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0100	0	UJ	mg/kg
SVOCs - 2,4-Dichlorophenol	SVOCs	2,4-Dichlorophenol	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00915	0	UJ	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.320	0	U	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.314	0	U	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.320	0	U	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.302	0	U	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.329	0	UJ	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.329	0	U	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.311	0	UJ	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.328	0	UJ	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.330	0	UJ	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.330	0	UJ	mg/kg
SVOCs - 2,4-Dinitro-o-cresol	SVOCs	2,4-Dinitro-o-cresol	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.302	0	U	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0641	0	U	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0629	0	U	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0641	0	U	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0604	0	U	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0658	0	UJ	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0658	0	U	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0623	0	UJ	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0656	0	UJ	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0660	0	UJ	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0660	0	U	mg/kg
SVOCs - 2,4-Dinitrotoluene	SVOCs	2,4-Dinitrotoluene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0604	0	U	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0272	0	U	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0267	0	U	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0272	0	U	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0256	0	U	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0279	0	UJ	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0279	0	UJ	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0264	0	UJ	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0278	0	UJ	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0280	0	UJ	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0280	0	UJ	mg/kg
SVOCs - 2,6-Dinitrotoluene	SVOCs	2,6-Dinitrotoluene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0256	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0184	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0181	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0184	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0174	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0189	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0189	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0179	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0189	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0190	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0190	0	UJ	mg/kg
SVOCs - 2-Methylnaphthalene	SVOCs	2-Methylnaphthalene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0174	0	UJ	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0100	0	U	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00981	0	U	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0100	0	U	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00942	0	U	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0103	0	UJ	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0103	0	U	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00972	0	UJ	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0102	0	UJ	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0103	0	UJ	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0103	0	UJ	mg/kg
SVOCs - Acenaphthene	SVOCs	Acenaphthene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00942	0	UJ	mg/kg

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Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS Design & consultancy for natural and built assets

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0797	0	U	mg/kg
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0782	0	U	mg/kg
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0797	0	U	mg/kg
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0751	0	U	mg/kg
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0818	0	UJ	mg/kg
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0818	0	UJ	mg/kg
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0775	0	UJ	mg/kg
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0816	0	UJ	mg/kg
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0821	0	UJ	mg/kg
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0821	0	UJ	mg/kg
SVOCs - Acenaphthylene	SVOCs	Acenaphthylene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0751	0	UJ	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0165	0	U	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0162	0	U	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0165	0	U	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0155	0	U	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0169	0	UJ	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0169	0	U	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0160	0	UJ	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0169	0	UJ	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0170	0	UJ	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0170	0	U	mg/kg
SVOCs - Anthracene	SVOCs	Anthracene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0155	0	U	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0359	0	U	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0352	0	U	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0359	0	U	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0338	0	U	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0369	0	UJ	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0369	0	U	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0349	0	U	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0368	0	UJ	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0370	0	UJ	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0370	0	U	mg/kg
SVOCs - Atrazine	SVOCs	Atrazine	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0338	0	U	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.961	0	U	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.943	0	U	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.961	0	U	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.905	0	U	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.987	0	UJ	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.987	0	U	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.934	0	U	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.983	0	UJ	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.990	0	UJ	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.990	0	U	mg/kg
SVOCs - Benzidine	SVOCs	Benzidine	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.905	0	U	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0194	0	U	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0190	0	U	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0194	0	U	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0183	0	U	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0199	0	UJ	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0199	0	U	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0189	0	UJ	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0199	0	UJ	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0200	0	UJ	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0200	0	U	mg/kg
SVOCs - Benzo(a)anthracene	SVOCs	Benzo(a)anthracene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0183	0	U	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0194	0	U	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0190	0	U	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0194	0	U	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0183	0	U	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0199	0	UJ	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0199	0	U	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0189	0	UJ	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0199	0	UJ	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0200	0	UJ	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0200	0	U	mg/kg
SVOCs - Benzo(a)pyrene	SVOCs	Benzo(a)pyrene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0183	0	U	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0254	0	U	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0250	0	U	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0254	0	U	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0240	0	U	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0261	0	UJ	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0261	0	U	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0247	0	U	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0260	0	UJ	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0262	0	UJ	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0262	0	U	mg/kg
SVOCs - Benzo(b)fluoranthene	SVOCs	Benzo(b)fluoranthene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0240	0	U	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0155	0	U	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0152	0	U	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0155	0	U	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0146	0	U	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0159	0	UJ	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0159	0	U	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0151	0	U	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0159	0	UJ	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0160	0	UJ	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0160	0	U	mg/kg
SVOCs - Benzo(g,h,i)perylene	SVOCs	Benzo(g,h,i)perylene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0146	0	U	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0388	0	U	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0381	0	U	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0388	0	U	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0366	0	U	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0399	0	UJ	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0399	0	U	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0377	0	U	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0397	0	UJ	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0400	0	UJ	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0400	0	U	mg/kg
SVOCs - Benzo(k)fluoranthene	SVOCs	Benzo(k)fluoranthene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0366	0	U	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0161	0	UJ	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0158	0	UJ	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0161	0	UJ	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0152	0	UJ	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0165	0	UJ	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0165	0	UJ	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0157	0	UJ	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0165	0	UJ	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0166	0	UJ	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0166	0	UJ	mg/kg
SVOCs - Bis(2-chloroethyl)ether	SVOCs	Bis(2-chloroethyl)ether	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0152	0	UJ	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0223	0	U	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0219	0	U	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0223	0	U	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0210	0	U	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0229	0	UJ	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0229	0	U	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0217	0	U	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0228	0	UJ	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0230	0	UJ	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0230	0	UJ	mg/kg
SVOCs - Bis(2-chloroisopropyl)ether	SVOCs	Bis(2-chloroisopropyl)ether	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0210	0	U	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.203	1	J	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.169	1	J	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0447	0	U	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0421	0	U	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0458	0	UJ	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0458	0	U	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0537	1	J	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0457	0	UJ	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0460	0	UJ	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0460	0	U	mg/kg
SVOCs - Bis(2-ethylhexyl)phthalate	SVOCs	Bis(2-ethylhexyl)phthalate	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0421	0	U	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0262	0	U	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0257	0	U	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0262	0	U	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0247	0	U	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0269	0	UJ	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0269	0	U	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0255	0	UJ	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0268	0	UJ	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0270	0	UJ	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0270	0	U	mg/kg
SVOCs - Chrysene	SVOCs	Chrysene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0247	0	U	mg/kg
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0184	0	U	mg/kg
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0181	0	U	mg/kg
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0184	0	U	mg/kg
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0174	0	U	mg/kg
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0189	0	UJ	mg/kg
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0189	0	U	mg/kg
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0179	0	U	mg/kg
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0189	0	UJ	mg/kg
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0190	0	UJ	mg/kg
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0190	0	U	mg/kg

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Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS Design & consultancy for natural and built assets

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
SVOCs - Dibenz(a,h)anthracene	SVOCs	Dibenz(a,h)anthracene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0174	0	U	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0282	0	U	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0276	0	U	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0282	0	U	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0265	0	U	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0289	0	UJ	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0289	0	U	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0274	0	U	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0286	0	UJ	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0290	0	UJ	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0290	0	U	mg/kg
SVOCs - Dibutylphthalate	SVOCs	Dibutylphthalate	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0265	0	U	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0874	0	U	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0857	0	U	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0874	0	U	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0823	0	U	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0897	0	UJ	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0897	0	U	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0849	0	U	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0894	0	UJ	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0900	0	UJ	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0900	0	U	mg/kg
SVOCs - Dichlorobenzidine, 3,3'-	SVOCs	Dichlorobenzidine, 3,3'-	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0823	0	U	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0252	0	U	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0248	0	U	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0252	0	U	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0238	0	U	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0259	0	UJ	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0259	0	UJ	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0245	0	UJ	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0258	0	UJ	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0260	0	UJ	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0260	0	UJ	mg/kg
SVOCs - Diethyl phthalate	SVOCs	Diethyl phthalate	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0238	0	U	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0223	0	U	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0219	0	U	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0223	0	U	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0210	0	U	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0229	0	UJ	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0229	0	U	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0217	0	UJ	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0228	0	UJ	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0230	0	UJ	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0230	0	UJ	mg/kg
SVOCs - Dimethyl phthalate	SVOCs	Dimethyl phthalate	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0210	0	UJ	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.323	0	U	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.3170	0	U	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.323	0	U	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.305	0	U	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.332	0	UJ	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.332	0	U	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.314	0	UJ	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.331	0	UJ	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.333	0	UJ	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.333	0	UJ	mg/kg
SVOCs - Dinitrophenols	SVOCs	Dinitrophenols	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.305	0	U	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0350	0	U	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0343	0	U	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0350	0	U	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0329	0	U	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0359	0	UJ	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0359	0	U	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0340	0	U	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0358	0	UJ	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0360	0	UJ	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0360	0	U	mg/kg
SVOCs - Fluoranthene	SVOCs	Fluoranthene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0329	0	U	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0175	0	U	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0171	0	U	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0175	0	U	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0165	0	U	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0179	0	UJ	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0179	0	UJ	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0170	0	UJ	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0179	0	UJ	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0180	0	UJ	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0180	0	UJ	mg/kg
SVOCs - Fluorene	SVOCs	Fluorene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0165	0	U	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0282	0	U	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0276	0	U	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0282	0	U	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0265	0	U	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0289	0	UJ	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0289	0	U	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0274	0	UJ	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0288	0	UJ	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0290	0	UJ	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0290	0	U	mg/kg
SVOCs - Hexachlorobenzene	SVOCs	Hexachlorobenzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0265	0	U	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00971	0	UJ	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00952	0	UJ	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00971	0	UJ	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00915	0	UJ	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0100	0	UJ	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0100	0	U	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00943	0	UJ	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00993	0	UJ	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0100	0	UJ	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0100	0	UJ	mg/kg
SVOCs - Hexachlorobutadiene	SVOCs	Hexachlorobutadiene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00915	0	UJ	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.108	0	U	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.106	0	U	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.108	0	U	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.102	0	U	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.111	0	UJ	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.111	0	U	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.105	0	U	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.110	0	UJ	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.111	0	UJ	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.111	0	U	mg/kg
SVOCs - Hexachlorocyclopentadiene	SVOCs	Hexachlorocyclopentadiene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.102	0	U	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0207	0	UJ	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0203	0	UJ	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0207	0	UJ	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0195	0	UJ	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0212	0	UJ	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0212	0	UJ	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0201	0	UJ	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0212	0	UJ	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0213	0	UJ	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0213	0	UJ	mg/kg
SVOCs - Hexachloroethane	SVOCs	Hexachloroethane	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0195	0	UJ	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0214	0	U	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0210	0	U	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0214	0	U	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0201	0	U	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0219	0	UJ	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0219	0	U	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0208	0	U	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0219	0	UJ	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0220	0	UJ	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0220	0	U	mg/kg
SVOCs - Indeno(1,2,3-cd)pyrene	SVOCs	Indeno(1,2,3-cd)pyrene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0201	0	U	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0165	0	UJ	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0162	0	UJ	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0165	0	UJ	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0155	0	UJ	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0169	0	UJ	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0169	0	U	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0160	0	UJ	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0169	0	UJ	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0170	0	UJ	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0170	0	UJ	mg/kg
SVOCs - Isophorone	SVOCs	Isophorone	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0155	0	UJ	mg/kg
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0301	0	UJ	mg/kg
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0295	0	UJ	mg/kg
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0301	0	UJ	mg/kg
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0284	0	UJ	mg/kg
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0309	0	UJ	mg/kg
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0309	0	UJ	mg/kg
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0292	0	UJ	mg/kg
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0308	0	UJ	mg/kg
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0310	0	UJ	mg/kg

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Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0310	0	UJ	mg/kg
SVOCs - Naphthalene	SVOCs	Naphthalene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0284	0	UJ	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0214	0	U	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0210	0	U	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0214	0	U	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0201	0	U	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0219	0	UJ	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0219	0	U	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0208	0	UJ	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0219	0	UJ	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0220	0	UJ	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0220	0	UJ	mg/kg
SVOCs - Nitrobenzene	SVOCs	Nitrobenzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0201	0	UJ	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0939	0	U	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0921	0	U	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0939	0	U	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0884	0	U	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0964	0	UJ	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0964	0	U	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0912	0	U	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0961	0	UJ	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0967	0	UJ	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0967	0	U	mg/kg
SVOCs - N-Nitrosodibutylamine	SVOCs	N-Nitrosodibutylamine	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0884	0	U	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0631	0	U	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0619	0	U	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0631	0	U	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0595	0	U	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0648	0	UJ	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0648	0	U	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0613	0	U	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0646	0	UJ	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0650	0	UJ	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0650	0	U	mg/kg
SVOCs - N-Nitrosodiethylamine	SVOCs	N-Nitrosodiethylamine	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0595	0	U	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0359	0	UJ	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0352	0	UJ	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0359	0	UJ	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0338	0	UJ	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0369	0	UJ	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0369	0	U	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0349	0	UJ	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0368	0	UJ	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0370	0	UJ	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0370	0	UJ	mg/kg
SVOCs - N-Nitrosodimethylamine	SVOCs	N-Nitrosodimethylamine	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0338	0	UJ	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0204	0	U	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0200	0	U	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0204	0	U	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0192	0	U	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0209	0	UJ	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0209	0	U	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0198	0	UJ	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0209	0	UJ	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0210	0	UJ	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0210	0	U	mg/kg
SVOCs - N-Nitrosodiphenylamine	SVOCs	N-Nitrosodiphenylamine	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0192	0	U	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0621	0	U	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0610	0	U	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0621	0	U	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0585	0	U	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0638	0	UJ	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0638	0	U	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0604	0	U	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0636	0	UJ	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0640	0	UJ	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0640	0	U	mg/kg
SVOCs - N-Nitrosopyrrolidine	SVOCs	N-Nitrosopyrrolidine	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0585	0	U	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0631	0	U	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0619	0	U	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0631	0	U	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0595	0	U	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0648	0	UJ	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0648	0	U	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0613	0	U	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0646	0	UJ	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0650	0	UJ	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0650	0	U	mg/kg
SVOCs - Pentachlorobenzene	SVOCs	Pentachlorobenzene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0595	0	U	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.320	0	U	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.314	0	U	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.320	0	U	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.302	0	U	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.329	0	UJ	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.329	0	U	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.311	0	U	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.328	0	UJ	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.330	0	UJ	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.330	0	U	mg/kg
SVOCs - Pentachlorophenol	SVOCs	Pentachlorophenol	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.302	0	U	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0165	0	U	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0162	0	U	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0165	0	U	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0155	0	U	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0169	0	UJ	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0169	0	U	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0160	0	UJ	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0169	0	UJ	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0170	0	UJ	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0170	0	U	mg/kg
SVOCs - Phenanthrene	SVOCs	Phenanthrene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0155	0	U	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0117	0	U	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0115	0	U	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0117	0	U	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0111	0	U	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0121	0	UJ	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0121	0	U	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0114	0	UJ	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0120	0	UJ	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0121	0	UJ	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0121	0	U	mg/kg
SVOCs - Pyrene	SVOCs	Pyrene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0111	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0637	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0639	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0629	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0647	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0634	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0650	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0652	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0648	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0648	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0647	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0632	0	U	mg/kg
TPH-GRO - GRO (C6-C10)	TPH-GRO	GRO (C6-C10)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.0822	1	J	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	35.2	0	U	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	34.7	0	U	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	33.9	0	U	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	35.4	0	U	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	33.9	0	U	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	34.5	0	U	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	36.2	0	U	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	56.9	1		mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	33.5	0	U	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	33.2	0	U	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	34.7	0	U	mg/kg
TPH-DRO & ORO - DRO (C10-C28)	TPH-DRO & ORO	DRO (C10-C28)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	72.3	1		mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	35.2	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	34.7	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	33.9	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	35.4	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	33.9	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	34.5	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	36.2	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	35.3	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	33.5	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	33.2	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	34.7	0	U	mg/kg
TPH-DRO & ORO - ORO (C28-C36)	TPH-DRO & ORO	ORO (C28-C36)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	33.5	0	U	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000748	0	U	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000756	0	U	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000779	0	U	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000787	0	U	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000785	0	U	mg/kg

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Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000750	0	U	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000744	0	U	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000800	0	U	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000768	0	U	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000791	0	U	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000767	0	UJ	mg/kg
Organochlorine Pesticides - Aldrin	Organochlorine Pesticides	Aldrin	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000791	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0117	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0118	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0121	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0123	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0122	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0117	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0116	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0125	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0120	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0123	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0120	0	U	mg/kg
Organochlorine Pesticides - Chlordane (technical)	Organochlorine Pesticides	Chlordane (technical)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.0123	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00110	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00111	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00114	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00116	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00115	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00110	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00109	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00117	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00113	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00116	0	U	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00113	0	UJ	mg/kg
Organochlorine Pesticides - DDT	Organochlorine Pesticides	DDT	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00116	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00107	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00108	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00111	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00112	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00112	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00107	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00106	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00114	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00110	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00113	0	U	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00110	0	UJ	mg/kg
Organochlorine Pesticides - Dieldrin	Organochlorine Pesticides	Dieldrin	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00113	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00117	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00118	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00121	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00123	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00122	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00117	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00116	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00125	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00120	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00123	0	U	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00120	0	UJ	mg/kg
Organochlorine Pesticides - Endosulfan I	Organochlorine Pesticides	Endosulfan I	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00123	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00144	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00145	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00150	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00151	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00151	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00144	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00143	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00154	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00148	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00152	0	U	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00147	0	UJ	mg/kg
Organochlorine Pesticides - Endosulfan II	Organochlorine Pesticides	Endosulfan II	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00152	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00124	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00126	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00129	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00131	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00130	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00125	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00124	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00133	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00128	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00132	0	U	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00127	0	UJ	mg/kg
Organochlorine Pesticides - Endosulfan sulfate	Organochlorine Pesticides	Endosulfan sulfate	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00131	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00184	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00187	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00192	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00194	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00194	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00185	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00184	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00198	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00189	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00195	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00189	0	U	mg/kg
Organochlorine Pesticides - Endrin	Organochlorine Pesticides	Endrin	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00195	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00127	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00129	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00132	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00134	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00134	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00128	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00127	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00136	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00131	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00135	0	U	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00130	0	UJ	mg/kg
Organochlorine Pesticides - Endrin aldehyde	Organochlorine Pesticides	Endrin aldehyde	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00134	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00153	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00155	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00160	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00162	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00161	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00154	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00153	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00164	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00158	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00162	0	U	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00157	0	UJ	mg/kg
Organochlorine Pesticides - Heptachlor	Organochlorine Pesticides	Heptachlor	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00162	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00140	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00141	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00146	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00147	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00147	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00140	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00139	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00150	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00144	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00148	0	U	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00143	0	UJ	mg/kg
Organochlorine Pesticides - Heptachlor epoxide	Organochlorine Pesticides	Heptachlor epoxide	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00148	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000883	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000894	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000920	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000930	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000928	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000887	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000879	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000946	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000907	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000935	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000906	0	UJ	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, alpha-	Organochlorine Pesticides	Hexachlorocyclohexane, alpha-	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000934	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00168	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00170	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00175	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00177	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00176	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00169	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00167	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00180	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00172	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00178	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00172	0	UJ	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, beta-	Organochlorine Pesticides	Hexachlorocyclohexane, beta-	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00178	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00164	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00166	0	U	mg/kg

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Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00171	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00173	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00172	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00165	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00163	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00176	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00168	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00174	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00168	0	UJ	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, delta-	Organochlorine Pesticides	Hexachlorocyclohexane, delta-	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00174	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00174	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00176	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00181	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00183	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00182	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00174	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00173	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00186	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00178	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00184	0	U	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00178	0	UJ	mg/kg
Organochlorine Pesticides - Hexachlorocyclohexane, gamma-	Organochlorine Pesticides	Hexachlorocyclohexane, gamma-	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00184	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0243	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0246	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0253	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0256	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0255	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0244	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0242	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0260	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0249	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0257	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0249	0	U	mg/kg
Organochlorine Pesticides - Toxaphene	Organochlorine Pesticides	Toxaphene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.0257	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00531	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00520	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00500	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00542	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00506	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00513	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00481	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00507	0	U	mg/kg
PCBs - Aroclor 1016	PCBs	Aroclor 1016	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00498	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00531	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00520	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00500	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00542	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00506	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00513	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00481	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00507	0	U	mg/kg
PCBs - Aroclor 1221	PCBs	Aroclor 1221	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00498	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00531	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00520	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00500	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00542	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00506	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00513	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00481	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00507	0	U	mg/kg
PCBs - Aroclor 1232	PCBs	Aroclor 1232	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00498	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00531	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00520	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00500	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00542	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00506	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00513	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00481	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00507	0	U	mg/kg
PCBs - Aroclor 1242	PCBs	Aroclor 1242	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00498	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00531	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00520	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00500	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00542	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00506	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00513	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00481	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00507	0	U	mg/kg
PCBs - Aroclor 1248	PCBs	Aroclor 1248	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00498	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.00531	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.00520	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00500	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.00542	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00506	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00504	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.00513	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00481	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00507	0	U	mg/kg
PCBs - Aroclor 1254	PCBs	Aroclor 1254	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00498	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.00987	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0104	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.00989	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0102	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.00980	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0106	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.00991	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.00987	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0101	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.00943	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.00994	0	U	mg/kg
PCBs - Aroclor 1260	PCBs	Aroclor 1260	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.00976	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0304	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0293	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0304	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0288	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0283	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0299	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0289	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0286	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0280	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0299	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0299	0	U	mg/kg
Nitroaromatics & Nitramines - 2,4,6-Trinitrotoluene	Nitroaromatics & Nitramines	2,4,6-Trinitrotoluene	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.0288	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0426	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0411	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0426	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0404	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0397	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0418	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0404	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0401	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0392	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0418	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0419	0	U	mg/kg
Nitroaromatics & Nitramines - Hexahydro-1,3,5-trinitro-1,3,5-triazine	Nitroaromatics & Nitramines	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.0403	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0225	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0217	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0225	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0213	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0209	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0221	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0213	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0212	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0207	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0221	0	U	mg/kg
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tet

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Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
Nitroaromatics & Nitramines - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Nitroaromatics & Nitramines	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.0213	0	U	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0000821	0	U	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000223	1	J	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0000800	0	U	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000107	1	J	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0000800	0	U	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000124	1	J	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000156	1	J	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000198	1	J	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0000822	0	U	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000219	1	J	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000142	1	J	mg/kg
Perchlorate - Perchlorate	Perchlorate	Perchlorate	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000132	1	J	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000275	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000260	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000266	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000260	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000263	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000255	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000262	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000265	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000266	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000269	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000261	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorohexanesulfonic acid (PFHxS)	Fluorinated Alkyl Substances	Perfluorohexanesulfonic acid (PFHxS)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000260	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000137	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000130	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000133	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000130	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000132	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000128	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000131	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000132	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000133	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000134	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000130	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanesulfonic acid (PFOS)	Fluorinated Alkyl Substances	Perfluorooctanesulfonic acid (PFOS)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000130	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.000226	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.000213	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.000218	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.000214	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.000216	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.000210	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.000215	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.000218	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.000218	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.000221	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.000214	0	U	mg/kg
Fluorinated Alkyl Substances - Perfluorooctanoic acid (PFOA)	Fluorinated Alkyl Substances	Perfluorooctanoic acid (PFOA)	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.000214	0	U	mg/kg
Metals - Antimony	Metals	Antimony	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	1.86	0	UJ	mg/kg
Metals - Antimony	Metals	Antimony	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	1.87	0	UJ	mg/kg
Metals - Antimony	Metals	Antimony	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	1.93	0	UJ	mg/kg
Metals - Antimony	Metals	Antimony	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	1.88	0	UJ	mg/kg
Metals - Antimony	Metals	Antimony	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.192	0	U	mg/kg
Metals - Antimony	Metals	Antimony	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.187	0	UJ	mg/kg
Metals - Antimony	Metals	Antimony	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.179	0	U	mg/kg
Metals - Antimony	Metals	Antimony	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	1.84	0	U	mg/kg
Metals - Antimony	Metals	Antimony	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.171	0	U	mg/kg
Metals - Antimony	Metals	Antimony	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.442	0	UJ	mg/kg
Metals - Antimony	Metals	Antimony	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.171	0	U	mg/kg
Metals - Antimony	Metals	Antimony	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	1.77	0	U	mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	3.72	0	U	mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	3.75	0	U	mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	3.86	0	U	mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	3.95	1	J	mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	1.98	1		mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	2.57	1		mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	3.37	1		mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	3.68	0	U	mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	2.08	1		mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	2.58	1		mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	2.78	1		mg/kg
Metals - Arsenic	Metals	Arsenic	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	3.55	0	U	mg/kg
Metals - Barium	Metals	Barium	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	368	1	J	mg/kg
Metals - Barium	Metals	Barium	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	280	1	J	mg/kg
Metals - Barium	Metals	Barium	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	291	1	J	mg/kg
Metals - Barium	Metals	Barium	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	266	1	J	mg/kg
Metals - Barium	Metals	Barium	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	46.2	1		mg/kg
Metals - Barium	Metals	Barium	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	268	1		mg/kg
Metals - Barium	Metals	Barium	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	501	1		mg/kg
Metals - Barium	Metals	Barium	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	347	1		mg/kg
Metals - Barium	Metals	Barium	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	37.4	1		mg/kg
Metals - Barium	Metals	Barium	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	102	1		mg/kg
Metals - Barium	Metals	Barium	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	334	1		mg/kg
Metals - Barium	Metals	Barium	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	299	1		mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.372	0	U	mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.375	0	U	mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.386	0	U	mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.376	0	U	mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.298	1		mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.214	1		mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.116	1		mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.368	0	U	mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.319	1		mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.318	1		mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.171	1		mg/kg
Metals - Beryllium	Metals	Beryllium	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.355	0	U	mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.223	0	U	mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.225	0	U	mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.231	0	U	mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.225	0	U	mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0392	1	J	mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0709	1		mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0576	1		mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.221	0	U	mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0289	1	J	mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0531	0	U	mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0669	1		mg/kg
Metals - Cadmium	Metals	Cadmium	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.213	0	U	mg/kg
Metals - Chromium	Metals	Chromium	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	4.18	0	U	mg/kg
Metals - Chromium	Metals	Chromium	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	4.22	0	U	mg/kg
Metals - Chromium	Metals	Chromium	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	4.34	0	U	mg/kg
Metals - Chromium	Metals	Chromium	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	4.23	0	U	mg/kg
Metals - Chromium	Metals	Chromium	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	4.93	1		mg/kg
Metals - Chromium	Metals	Chromium	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	3.55	1		mg/kg
Metals - Chromium	Metals	Chromium	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	2.05	1		mg/kg
Metals - Chromium	Metals	Chromium	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	4.14	0	U	mg/kg
Metals - Chromium	Metals	Chromium	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	5.08	1		mg/kg
Metals - Chromium	Metals	Chromium	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	4.94	1		mg/kg
Metals - Chromium	Metals	Chromium	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	3.12	1		mg/kg
Metals - Chromium	Metals	Chromium	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	3.99	0	U	mg/kg
Metals - Copper	Metals	Copper	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	3.72	0	U	mg/kg
Metals - Copper	Metals	Copper	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	3.75	0	U	mg/kg
Metals - Copper	Metals	Copper	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	3.86	0	U	mg/kg
Metals - Copper	Metals	Copper	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	3.76	0	U	mg/kg
Metals - Copper	Metals	Copper	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	1.86	1		mg/kg
Metals - Copper	Metals	Copper	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	1.85	1		mg/kg
Metals - Copper	Metals	Copper	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	1.14	1		mg/kg
Metals - Copper	Metals	Copper	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	3.68	0	U	mg/kg
Metals - Copper	Metals	Copper	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	1.97	1		mg/kg
Metals - Copper	Metals	Copper	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	2.17	1		mg/kg
Metals - Copper	Metals	Copper	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	1.80	1		mg/kg
Metals - Copper	Metals	Copper	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	3.55	0	U	mg/kg
Metals - Iron	Metals	Iron	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	2570	1	J	mg/kg
Metals - Iron	Metals	Iron	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	2670	1	J	mg/kg
Metals - Iron	Metals	Iron	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	2500	1	J	mg/kg
Metals - Iron	Metals	Iron	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	1970	1	J	mg/kg
Metals - Iron	Metals	Iron	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	4900	1		mg/kg
Metals - Iron	Metals	Iron	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	3630	1		mg/kg
Metals - Iron	Metals	Iron	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	1890	1		mg/kg
Metals - Iron	Metals	Iron	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	2860	1		mg/kg
Metals - Iron	Metals	Iron	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	5330	1		mg/kg
Metals - Iron	Metals	Iron	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	5310	1		mg/kg
Metals - Iron	Metals	Iron	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	3080	1		mg/kg
Metals - Iron	Metals	Iron	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	1980	1		mg/kg
Metals - Lead	Metals	Lead	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	1.82	1	J	mg/kg
Metals - Lead	Metals	Lead	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	1.98	1	J	mg/kg
Metals - Lead	Metals	Lead	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	1.93	1	J	mg/kg
Metals - Lead	Metals	Lead	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	1.30	1	J	mg/kg
Metals - Lead	Metals	Lead	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	4.20	1		mg/kg
Metals - Lead	Metals	Lead	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	2.84	1		mg/kg
Metals - Lead	Metals	Lead	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	1.44	1		mg/kg
Metals - Lead	Metals	Lead	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	2.02	1	J	mg/kg

Released to Imaging: 5/27/2022 3:16:29 PM

Received by OCD: 5/5/2022 7:41:01 AM

Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
Metals - Lead	Metals	Lead	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	4.50	1		mg/kg
Metals - Lead	Metals	Lead	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	4.08	1		mg/kg
Metals - Lead	Metals	Lead	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	2.29	1		mg/kg
Metals - Lead	Metals	Lead	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	1.36	1	J	mg/kg
Metals - Manganese	Metals	Manganese	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	23.5	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	31.9	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	34.9	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	24.2	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	39.2	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	41.1	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	22.9	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	41.5	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	38.8	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	47.0	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	39.4	1		mg/kg
Metals - Manganese	Metals	Manganese	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	19.7	1		mg/kg
Metals - Selenium	Metals	Selenium	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	2.97	0	U	mg/kg
Metals - Selenium	Metals	Selenium	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	3.00	0	U	mg/kg
Metals - Selenium	Metals	Selenium	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	3.09	0	U	mg/kg
Metals - Selenium	Metals	Selenium	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	3.01	0	U	mg/kg
Metals - Selenium	Metals	Selenium	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.307	0	U	mg/kg
Metals - Selenium	Metals	Selenium	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.299	0	U	mg/kg
Metals - Selenium	Metals	Selenium	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.286	0	U	mg/kg
Metals - Selenium	Metals	Selenium	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	2.95	0	U	mg/kg
Metals - Selenium	Metals	Selenium	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.279	1	J	mg/kg
Metals - Selenium	Metals	Selenium	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.283	0	U	mg/kg
Metals - Selenium	Metals	Selenium	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.274	0	U	mg/kg
Metals - Selenium	Metals	Selenium	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	2.84	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.697	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.703	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.723	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.704	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0720	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0700	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0671	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.691	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0642	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.166	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0641	0	U	mg/kg
Metals - Silver	Metals	Silver	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.665	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	1.86	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	1.87	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	1.93	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	1.88	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.192	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.187	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.179	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	1.84	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.171	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.177	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.171	0	U	mg/kg
Metals - Thallium	Metals	Thallium	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	1.77	0	U	mg/kg
Metals - Uranium	Metals	Uranium	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.466	1	J	mg/kg
Metals - Uranium	Metals	Uranium	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.414	1	J	mg/kg
Metals - Uranium	Metals	Uranium	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.457	1	J	mg/kg
Metals - Uranium	Metals	Uranium	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.428	1	J	mg/kg
Metals - Uranium	Metals	Uranium	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.156	1		mg/kg
Metals - Uranium	Metals	Uranium	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.310	1		mg/kg
Metals - Uranium	Metals	Uranium	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.461	1		mg/kg
Metals - Uranium	Metals	Uranium	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.389	1	J	mg/kg
Metals - Uranium	Metals	Uranium	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.126	1		mg/kg
Metals - Uranium	Metals	Uranium	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.197	1		mg/kg
Metals - Uranium	Metals	Uranium	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.420	1		mg/kg
Metals - Uranium	Metals	Uranium	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.365	1	J	mg/kg
Metals - Zinc	Metals	Zinc	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	18.6	0	U	mg/kg
Metals - Zinc	Metals	Zinc	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	18.7	0	U	mg/kg
Metals - Zinc	Metals	Zinc	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	19.3	0	U	mg/kg
Metals - Zinc	Metals	Zinc	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	18.8	0	U	mg/kg
Metals - Zinc	Metals	Zinc	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	8.67	1		mg/kg
Metals - Zinc	Metals	Zinc	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	7.23	1		mg/kg
Metals - Zinc	Metals	Zinc	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	4.52	1		mg/kg
Metals - Zinc	Metals	Zinc	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	18.4	0	U	mg/kg
Metals - Zinc	Metals	Zinc	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	9.72	1		mg/kg
Metals - Zinc	Metals	Zinc	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	9.82	1		mg/kg
Metals - Zinc	Metals	Zinc	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	7.10	1		mg/kg
Metals - Zinc	Metals	Zinc	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	17.7	0	U	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.0322	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.0321	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0294	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0309	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.0310	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.0301	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0322	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.0295	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.0303	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.0297	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.0303	0	UBJ	mg/kg
Mercury - Mercury	Mercury	Mercury	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.0290	0	UBJ	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.170	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.164	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.198	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.207	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.207	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.164	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.190	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.207	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.216	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.176	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.183	0	U	mg/kg
General Chemistry - Cyanide, Total	General Chemistry	Cyanide, Total	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.198	0	U	mg/kg
General Chemistry - pH	General Chemistry	pH	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	8.10	1		SU
General Chemistry - pH	General Chemistry	pH	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	8.0	1		SU
General Chemistry - pH	General Chemistry	pH	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	8.4	1		SU
General Chemistry - pH	General Chemistry	pH	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	8.3	1		SU
General Chemistry - pH	General Chemistry	pH	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	8.2	1		SU
General Chemistry - pH	General Chemistry	pH	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	8.1	1	J	SU
General Chemistry - pH	General Chemistry	pH	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	8.3	1	J	SU
General Chemistry - pH	General Chemistry	pH	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	8.2	1		SU
General Chemistry - pH	General Chemistry	pH	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	8.2	1		SU
General Chemistry - pH	General Chemistry	pH	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	7.70	1	J	SU
General Chemistry - pH	General Chemistry	pH	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	8.3	1	J	SU
General Chemistry - pH	General Chemistry	pH	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	8.0	1		SU
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.34	0	U	mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.338	0	U	mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	2.20	1		mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.338	0	U	mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.429	1	J	mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	5.59	1		mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.335	0	U	mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.334	0	U	mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.338	0	U	mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	2.40	1		mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.408	1	J	mg/kg
General Chemistry - Phenols, Total	General Chemistry	Phenols, Total	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.358	1	J	mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	6.11	1	J	mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	29.3	1		mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	6.79	1	J	mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	25.8	1		mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	5.94	1	J	mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	7.18	1	J	mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	12.4	1		mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	12.5	1		mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	4.82	0	U	mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	11.6	1		mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	11.0	1		mg/kg
General Chemistry - Soluble - Chloride	General Chemistry - Soluble	Chloride	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	39.8	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	3.21	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	5.58	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	7.52	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	8.30	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	3.57	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	4.24	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	5.57	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	5.33	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	2.98	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	4.29	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	5.79	1		mg/kg
General Chemistry - Soluble - Fluoride	General Chemistry - Soluble	Fluoride	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	5.70	1		mg/kg
General Chemistry - Soluble - Nitrate as N	General Chemistry - Soluble	Nitrate as N	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	2.05	1	J	mg/kg
General Chemistry - Soluble - Nitrate as N	General Chemistry - Soluble	Nitrate as N	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	1.56	1	J	mg/kg
General Chemistry - Soluble - Nitrate as N	General Chemistry - Soluble	Nitrate as N	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	1.77	1	J	mg/kg
General Chemistry - Soluble - Nitrate as N	General Chemistry - Soluble	Nitrate as N	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	4.26	1	J	mg/kg
General Chemistry - Soluble - Nitrate as N	General Chemistry - Soluble	Nitrate as N	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	2.16	1	J	mg/kg

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Appendix D. ProUCL Input for Background Soil Descriptive Statistics and Interval Estimator Statistics
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Analytical Group - Compound	Analytical Group	Compound Name	Location	Sample ID	Date	Result	D_Result	Data Validation Qualifier	Units
General Chemistry - Soluble - Nitrate as N	General Chemistry - Soluble	Nitrate as N	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	2.69	1	J	mg/kg
General Chemistry - Soluble - Nitrate as N	General Chemistry - Soluble	Nitrate as N	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	1.52	1	J	mg/kg
General Chemistry - Soluble - Nitrate as N	General Chemistry - Soluble	Nitrate as N	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	1.90	1	J	mg/kg
General Chemistry - Soluble - Nitrate as N	General Chemistry - Soluble	Nitrate as N	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	2.50	1	J	mg/kg
General Chemistry - Soluble - Nitrate as N	General Chemistry - Soluble	Nitrate as N	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	2.83	1	J	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	4.39	1	J	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	1.56	1	J	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	2.92	1	J	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	4.26	1	J	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	4.96	0	UBJ	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	5.08	0	UB	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	4.98	0	UB	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	5.13	0	UB	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	4.89	0	UB	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	4.99	0	UB	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	4.96	0	UB	mg/kg
General Chemistry - Soluble - Nitrate Nitrite as N	General Chemistry - Soluble	Nitrate Nitrite as N	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.277	0	U	mg/kg
General Chemistry - Soluble - Nitrite as N	General Chemistry - Soluble	Nitrite as N	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	2.34	1	J	mg/kg
General Chemistry - Soluble - Nitrite as N	General Chemistry - Soluble	Nitrite as N	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	1.15	1	J	mg/kg
General Chemistry - Soluble - Nitrite as N	General Chemistry - Soluble	Nitrite as N	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	4.96	0	UBJ	mg/kg
General Chemistry - Soluble - Nitrite as N	General Chemistry - Soluble	Nitrite as N	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	4.89	0	UBJ	mg/kg
General Chemistry - Soluble - Nitrite as N	General Chemistry - Soluble	Nitrite as N	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	4.96	0	UBJ	mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	28.1	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	158	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	65.3	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	125	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	23.6	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	45.1	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	49.5	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	51.1	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	18.0	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	85.3	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	52.4	1		mg/kg
General Chemistry - Soluble - Sulfate	General Chemistry - Soluble	Sulfate	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	935	1		mg/kg
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	171	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	160	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	132	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	164	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	270	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	177	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	112	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	168	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	370	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	180	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	141	1		mg/L
General Chemistry - 7 Day Leach - Total Dissolved Solids	General Chemistry - 7 Day Leach	Total Dissolved Solids	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	524	1		mg/L
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.753	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.987	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.838	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	1.15	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.621	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.532	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.985	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.957	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.671	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.969	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.897	1		pCi/g
Radium-226 & Other Gamma Emitters - Combined Radium 226/228	Radium-226 & Other Gamma Emitters	Combined Radium 226/228	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.936	1		pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.171	0	U	pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.817	1		pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.788	1	Q	pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	1.09	1		pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.297	1	Q	pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.356	1		pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.895	1		pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.842	1		pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.366	1	Q	pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.447	1	Q	pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.677	1	Q	pCi/g
Radium-226 & Other Gamma Emitters - Radium-226	Radium-226 & Other Gamma Emitters	Radium-226	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.722	1	Q	pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 29	Cell 29-BG-S-3-4-210302	3/2/2021	0.583	1		pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 30	Cell 30-BG-S-3-4-210302	3/2/2021	0.170	0	U	pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 31	Cell 31-BG-S-3-4-210303	3/3/2021	0.0506	0	U	pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 32	Cell 32-BG-S-3-4-210303	3/3/2021	0.0598	0	U	pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 33	Cell 33 -BG-S-3-4-210304	3/4/2021	0.324	0	U	pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 34	Cell 34 -BG-S-3-4-210305	3/5/2021	0.176	1		pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 35	Cell 35 -BG-S-3-4-210308	3/8/2021	0.0895	0	U	pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 36	Cell 36-BG-S-3-4-210309	3/9/2021	0.115	0	U	pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 37	Cell 37 -BG-S-3-4-210304	3/4/2021	0.305	1		pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 38	Cell 38 -BG-S-3-4-210305	3/5/2021	0.522	1		pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 39	Cell 39 -BG-S-3-4-210308	3/8/2021	0.219	1	Q	pCi/g
Radium-226 & Other Gamma Emitters - Radium-228	Radium-226 & Other Gamma Emitters	Radium-228	Cell 40	Cell 40-BG-S-3-4-210309	3/9/2021	0.214	1		pCi/g

Notes:
1. Background soil samples were collected from the vadose zone.
2. Rejected (i.e., "R" flagged) analytical results are excluded from the ProUCL input table.
3. The associated numerical value for non-detections is the method detection limit (MDL).

Analytical Group Abbreviations:
PCBs = Polychlorinated Biphenyls
SVOCs = Semivolatile Organic Compounds
TPH-DRO & ORO = Total Petroleum Hydrocarbons (TPH) - Diesel Range Organics (DRO) and Oil Range Organics (ORO)
TPH-GRO = Total Petroleum Hydrocarbons (TPH) - Gasoline Range Organics (GRO)
VOCs = Volatile Organic Compounds

Unit Abbreviations:
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
pCi/g = average picocuries per gram
SU = standard unit

Data Validation Qualifers:
B = The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.
Q = Quantitative uncertainty is associated with sample results less than 1pCi/g and a reported uncertainty greater than 0.15 pCi/g or results greater than 1 pCi/g with a reported uncertainty greater than 0.15 times the result.
R = The sample results are rejected.
U = The compound was analyzed for but not detected. The associated value is the analyte instrument method detection limit (MDL).
UB = Compound considered non-detect at the listed value due to associated blank contamination.
UBJ = The compound was not detected above the reported sample quantification limit. However, the reported limit is approximate and may or may not represent the actual limit of quantification and the compound considered non-detect at the listed value due to associated blank contamination.
UJ = The compound was not detected above the reported sample quantification limit. However, the reported limit is approximate and may or may not represent the actual limit of quantification.

VOC Synonyms:
Tetrachloroethylene = Tetrachloroethene
1,1-Dichloroethylene = 1,1-Dichloroethene

SVOC Synonyms:
Bis(2-ethylhexyl)phthalate = Di (2-ethylhexyl)phthalate
N-Nitrosodibutylamine = N-Nitrosodi-n-butylamine
Benzo(b)fluoranthene = 3,4-Benzofluoranthene

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Appendix E

ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ProUCL Output
Summary Statistics with Outliers Included
Summary Statistics with Outliers Excluded
95% Upper Confidence Limits with Outliers Included
95% Upper Confidence Limits with Outliers Excluded
95/95 Upper Tolerance Limits with Outliers Included
95/95 Upper Tolerance Limits with Outliers Excluded
Goodness-of-Fit Test for Potential Outlier Dataset with the Potential Outlier Excluded from Testinc
Dixon's Statistical Outlier Test for Potential Outlier Dataset

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.17/25/2021 7:29:52 AM
User Selected Options
From File WorkSheet.xls
Full Precision OFF

From File: WorkSheet.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
fluorinated alkyl substances - perfluorohexanesulfonic acid (pfhxs)	12	0	0	12	100.00%	0.000255	0.000275	N/A	N/A	N/A	N/A
fluorinated alkyl substances - perfluorooctanesulfonic acid (pfos)	12	0	0	12	100.00%	0.000128	0.000137	N/A	N/A	N/A	N/A
fluorinated alkyl substances - perfluorooctanoic acid (pfoa)	12	0	0	12	100.00%	0.000210	0.000226	N/A	N/A	N/A	N/A
general chemistry - 7 day leach - total dissolved solids	12	0	12	0	0.00%	N/A	N/A	214	14358	120	0.560
general chemistry - cyanide, total	12	0	0	12	100.00%	0.164	0.216	N/A	N/A	N/A	N/A
general chemistry - ph	12	0	12	0	0.00%	N/A	N/A	8.15	0.0355	0.188	0.0231
general chemistry - phenols, total	12	0	6	6	50.00%	0.334	0.340	1.12	2.34	1.53	1.37
general chemistry - soluble - chloride	12	0	11	1	8.33%	4.82	4.82	14.4	114	10.7	0.739
general chemistry - soluble - fluoride	12	0	12	0	0.00%	N/A	N/A	5.17	2.65	1.63	0.315
general chemistry - soluble - nitrate as n	10	0	10	0	0.00%	N/A	N/A	2.32	0.665	0.816	0.351
general chemistry - soluble - nitrate nitrite as n	12	0	4	8	66.67%	0.277	5.13	2.68	2.50	1.58	0.590
general chemistry - soluble - nitrite as n	5	0	2	3	60.00%	4.89	4.96	1.75	0.354	0.595	0.341
general chemistry - soluble - sulfate	12	0	12	0	0.00%	N/A	N/A	136	64974	255	1.87
mercury - mercury	12	0	0	12	100.00%	0.0290	0.0322	N/A	N/A	N/A	N/A
metals - antimony	12	0	0	12	100.00%	0.171	1.93	N/A	N/A	N/A	N/A
metals - arsenic	12	0	7	5	41.67%	3.55	3.86	2.68	0.342	0.585	0.219
metals - barium	12	0	12	0	0.00%	N/A	N/A	262	18724	137	0.523
metals - beryllium	12	0	6	6	50.00%	0.355	0.386	0.239	0.00608	0.0780	0.326
metals - cadmium	12	0	5	7	58.33%	0.0531	0.231	0.0496	0.000270	0.0164	0.332
metals - chromium	12	0	6	6	50.00%	3.99	4.34	3.43	1.11	1.05	0.307
metals - copper	12	0	6	6	50.00%	3.55	3.86	1.80	0.101	0.318	0.177
metals - iron	12	0	12	0	0.00%	N/A	N/A	3224	1642917	1282	0.398
metals - lead	12	0	12	0	0.00%	N/A	N/A	2.48	1.34	1.16	0.466
metals - manganese	12	0	12	0	0.00%	N/A	N/A	33.7	81.17	9.01	0.268
metals - selenium	12	0	1	11	91.67%	0.274	3.09	0.277	0.00000625	0.00250	0.00904
metals - silver	12	0	0	12	100.00%	0.0641	0.723	N/A	N/A	N/A	N/A
metals - thallium	12	0	0	12	100.00%	0.171	1.93	N/A	N/A	N/A	N/A
metals - uranium	12	0	12	0	0.00%	N/A	N/A	0.349	0.0152	0.123	0.353
metals - zinc	12	0	6	6	50.00%	17.7	19.3	7.84	3.35	1.83	0.233
nitroaromatics & nitramines - 2,4,6-trinitrotoluene	12	0	0	12	100.00%	0.0280	0.0304	N/A	N/A	N/A	N/A
nitroaromatics & nitramines - hexahydro-1,3,5-trinitro-1,3,5-triazine	12	0	0	12	100.00%	0.0392	0.0426	N/A	N/A	N/A	N/A
nitroaromatics & nitramines - octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	12	0	0	12	100.00%	0.0207	0.0225	N/A	N/A	N/A	N/A
organochlorine pesticides - aldrin	12	0	0	12	100.00%	0.000744	0.000800	N/A	N/A	N/A	N/A
organochlorine pesticides - chlordane (technical)	12	0	0	12	100.00%	0.0116	0.0125	N/A	N/A	N/A	N/A
organochlorine pesticides - ddt	12	0	0	12	100.00%	0.00109	0.00117	N/A	N/A	N/A	N/A
organochlorine pesticides - dieldrin	12	0	0	12	100.00%	0.00106	0.00114	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan i	12	0	0	12	100.00%	0.00116	0.00125	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan ii	12	0	0	12	100.00%	0.00143	0.00154	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan sulfate	12	0	0	12	100.00%	0.00124	0.00133	N/A	N/A	N/A	N/A
organochlorine pesticides - endrin	12	0	0	12	100.00%	0.00184	0.00198	N/A	N/A	N/A	N/A
organochlorine pesticides - endrin aldehyde	12	0	0	12	100.00%	0.00127	0.00136	N/A	N/A	N/A	N/A
organochlorine pesticides - heptachlor	12	0	0	12	100.00%	0.00153	0.00164	N/A	N/A	N/A	N/A
organochlorine pesticides - heptachlor epoxide	12	0	0	12	100.00%	0.00139	0.00150	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, alpha-	12	0	0	12	100.00%	0.000879	0.000946	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, beta-	12	0	0	12	100.00%	0.00167	0.00180	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, delta-	12	0	0	12	100.00%	0.00163	0.00176	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, gamma-	12	0	0	12	100.00%	0.00173	0.00186	N/A	N/A	N/A	N/A
organochlorine pesticides - toxaphene	12	0	0	12	100.00%	0.0242	0.0260	N/A	N/A	N/A	N/A
pcbs - aroclor 1016	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1221	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1232	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1242	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1248	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1254	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1260	12	0	0	12	100.00%	0.00943	0.0106	N/A	N/A	N/A	N/A
perchlorate - perchlorate	12	0	8	4	33.33%	0.0000800	0.0000822	0.000135	0.00000000269	0.0000519	0.384
pesticides - prometon	11	0	0	11	100.00%	0.0117	0.0120	N/A	N/A	N/A	N/A
radium-226 & other gamma emitters - combined radium 226/228	12	0	12	0	0.00%	N/A	N/A	0.858	0.0324	0.180	0.210
radium-226 & other gamma emitters - radium-226	12	0	11	1	8.33%	0.171	0.171	0.622	0.0747	0.273	0.439
radium-226 & other gamma emitters - radium-228	12	0	6	6	50.00%	0.0506	0.324	0.200	0.0323	0.180	0.898
svocs - 1,2,4,5-tetrachlorobenzene	11	0	0	11	100.00%	0.0448	0.0490	N/A	N/A	N/A	N/A
svocs - 1,2-diphenylhydrazine	11	0	0	11	100.00%	0.0201	0.0220	N/A	N/A	N/A	N/A
svocs - 1-methylnaphthalene	11	0	0	11	100.00%	0.0102	0.0112	N/A	N/A	N/A	N/A
svocs - 2,4,5-trichlorophenol	11	0	0	11	100.00%	0.00915	0.0100	N/A	N/A	N/A	N/A
svocs - 2,4,6-trichlorophenol	11	0	0	11	100.00%	0.00915	0.0100	N/A	N/A	N/A	N/A
svocs - 2,4-dichlorophenol	11	0	0	11	100.00%	0.00915	0.0100	N/A	N/A	N/A	N/A
svocs - 2,4-dinitro-o-cresol	11	0	0	11	100.00%	0.302	0.330	N/A	N/A	N/A	N/A
svocs - 2,4-dinitrotoluene	11	0	0	11	100.00%	0.0604	0.0660	N/A	N/A	N/A	N/A
svocs - 2,6-dinitrotoluene	11	0	0	11	100.00%	0.0256	0.0280	N/A	N/A	N/A	N/A
svocs - 2-methylnaphthalene	11	0	0	11	100.00%	0.0174	0.0190	N/A	N/A	N/A	N/A
svocs - acenaphthene	11	0	0	11	100.00%	0.00942	0.0103	N/A	N/A	N/A	N/A
svocs - acenaphthylene	11	0	0	11	100.00%	0.0751	0.0821	N/A	N/A	N/A	N/A
svocs - anthracene	11	0	0	11	100.00%	0.0155	0.0170	N/A	N/A	N/A	N/A
svocs - atrazine	11	0	0	11	100.00%	0.0338	0.0370	N/A	N/A	N/A	N/A

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

svocs - benzidine	11	0	0	11	100.00%	0.905	0.990	N/A	N/A	N/A	N/A
svocs - benzo(a)anthracene	11	0	0	11	100.00%	0.0183	0.0200	N/A	N/A	N/A	N/A
svocs - benzo(a)pyrene	11	0	0	11	100.00%	0.0183	0.0200	N/A	N/A	N/A	N/A
svocs - benzo(b)fluoranthene	11	0	0	11	100.00%	0.0240	0.0262	N/A	N/A	N/A	N/A
svocs - benzo(g,h,i)perylene	11	0	0	11	100.00%	0.0146	0.0160	N/A	N/A	N/A	N/A
svocs - benzo(k)fluoranthene	11	0	0	11	100.00%	0.0366	0.0400	N/A	N/A	N/A	N/A
svocs - bis(2-chloroethyl)ether	11	0	0	11	100.00%	0.0152	0.0166	N/A	N/A	N/A	N/A
svocs - bis(2-chloroisopropyl)ether	11	0	0	11	100.00%	0.0210	0.0230	N/A	N/A	N/A	N/A
svocs - bis(2-ethylhexyl)phthalate	11	0	3	8	72.73%	0.0421	0.0460	0.0693	0.00309	0.0556	0.802
svocs - chrysene	11	0	0	11	100.00%	0.0247	0.0270	N/A	N/A	N/A	N/A
svocs - dibenz(a,h)anthracene	11	0	0	11	100.00%	0.0174	0.0190	N/A	N/A	N/A	N/A
svocs - dibutylphthalate	11	0	0	11	100.00%	0.0265	0.0290	N/A	N/A	N/A	N/A
svocs - dichlorobenzidine, 3,3'-	11	0	0	11	100.00%	0.0823	0.0900	N/A	N/A	N/A	N/A
svocs - diethyl phthalate	11	0	0	11	100.00%	0.0238	0.0260	N/A	N/A	N/A	N/A
svocs - dimethyl phthalate	11	0	0	11	100.00%	0.0210	0.0230	N/A	N/A	N/A	N/A
svocs - dinitrophenols	11	0	0	11	100.00%	0.305	0.333	N/A	N/A	N/A	N/A
svocs - fluoranthene	11	0	0	11	100.00%	0.0329	0.0360	N/A	N/A	N/A	N/A
svocs - fluorene	11	0	0	11	100.00%	0.0165	0.0180	N/A	N/A	N/A	N/A
svocs - hexachlorobenzene	11	0	0	11	100.00%	0.0265	0.0290	N/A	N/A	N/A	N/A
svocs - hexachlorobutadiene	11	0	0	11	100.00%	0.00915	0.0100	N/A	N/A	N/A	N/A
svocs - hexachlorocyclopentadiene	11	0	0	11	100.00%	0.102	0.111	N/A	N/A	N/A	N/A
svocs - hexachloroethane	11	0	0	11	100.00%	0.0195	0.0213	N/A	N/A	N/A	N/A
svocs - indeno(1,2,3-cd)pyrene	11	0	0	11	100.00%	0.0201	0.0220	N/A	N/A	N/A	N/A
svocs - isophorone	11	0	0	11	100.00%	0.0155	0.0170	N/A	N/A	N/A	N/A
svocs - naphthalene	11	0	0	11	100.00%	0.0284	0.0310	N/A	N/A	N/A	N/A
svocs - nitrobenzene	11	0	0	11	100.00%	0.0201	0.0220	N/A	N/A	N/A	N/A
svocs - n-nitrosodibutylamine	11	0	0	11	100.00%	0.0884	0.0967	N/A	N/A	N/A	N/A
svocs - n-nitrosodiethylamine	11	0	0	11	100.00%	0.0595	0.0650	N/A	N/A	N/A	N/A
svocs - n-nitrosodimethylamine	11	0	0	11	100.00%	0.0338	0.0370	N/A	N/A	N/A	N/A
svocs - n-nitrosodiphenylamine	11	0	0	11	100.00%	0.0192	0.0210	N/A	N/A	N/A	N/A
svocs - n-nitrosopyrrolidine	11	0	0	11	100.00%	0.0585	0.0640	N/A	N/A	N/A	N/A
svocs - pentachlorobenzene	11	0	0	11	100.00%	0.0595	0.0650	N/A	N/A	N/A	N/A
svocs - pentachlorophenol	11	0	0	11	100.00%	0.302	0.330	N/A	N/A	N/A	N/A
svocs - phenanthrene	11	0	0	11	100.00%	0.0155	0.0170	N/A	N/A	N/A	N/A
svocs - pyrene	11	0	0	11	100.00%	0.0111	0.0121	N/A	N/A	N/A	N/A
tph-dro & oro - dro (c10-c28)	12	0	2	10	83.33%	33.2	36.2	38.4	147	12.1	0.315
tph-dro & oro - oro (c28-c36)	12	0	0	12	100.00%	33.2	36.2	N/A	N/A	N/A	N/A
tph-gro - gro (c6-c10)	12	0	1	11	91.67%	0.0629	0.0652	0.0645	0.0000285	0.00533	0.0827
vocs - 1,1,1-trichloroethane	12	0	0	12	100.00%	0.000490	0.000558	N/A	N/A	N/A	N/A
vocs - 1,1,2,2-tetrachloroethane	12	0	0	12	100.00%	0.000373	0.000424	N/A	N/A	N/A	N/A
vocs - 1,1,2-trichloroethane	12	0	0	12	100.00%	0.000490	0.000558	N/A	N/A	N/A	N/A
vocs - 1,1-dichloroethane	12	0	0	12	100.00%	0.000578	0.000658	N/A	N/A	N/A	N/A
vocs - 1,1-dichloroethylene	12	0	0	12	100.00%	0.000490	0.000558	N/A	N/A	N/A	N/A
vocs - 1,1-dichloropropene	12	0	0	12	100.00%	0.000510	0.000580	N/A	N/A	N/A	N/A
vocs - 1,2,4-trichlorobenzene	12	0	0	12	100.00%	0.000951	0.00108	N/A	N/A	N/A	N/A
vocs - 1,2-dibromoethane	12	0	0	12	100.00%	0.000294	0.000335	N/A	N/A	N/A	N/A
vocs - 1,2-dichlorobenzene	12	0	0	12	100.00%	0.000245	0.000279	N/A	N/A	N/A	N/A
vocs - 1,2-dichloroethane	12	0	0	12	100.00%	0.000510	0.000580	N/A	N/A	N/A	N/A
vocs - 1,2-dichloropropane	12	0	0	12	100.00%	0.000490	0.000558	N/A	N/A	N/A	N/A
vocs - 1,3-dichlorobenzene	12	0	0	12	100.00%	0.000304	0.000346	N/A	N/A	N/A	N/A
vocs - 1,3-dichloropropene, total	12	0	0	12	100.00%	0.000510	0.000580	N/A	N/A	N/A	N/A
vocs - 1,4-dichlorobenzene	12	0	0	12	100.00%	0.000314	0.000357	N/A	N/A	N/A	N/A
vocs - 1,4-dioxane	12	0	0	12	100.00%	0.0186	0.0212	N/A	N/A	N/A	N/A
vocs - acrolein	12	0	0	12	100.00%	0.00843	0.00960	N/A	N/A	N/A	N/A
vocs - acrylonitrile	12	0	0	12	100.00%	0.00353	0.00402	N/A	N/A	N/A	N/A
vocs - benzene	12	0	0	12	100.00%	0.000618	0.000703	N/A	N/A	N/A	N/A
vocs - bromodichloromethane	12	0	0	12	100.00%	0.000196	0.000223	N/A	N/A	N/A	N/A
vocs - bromomethane	12	0	0	12	100.00%	0.00108	0.00123	N/A	N/A	N/A	N/A
vocs - carbon tetrachloride	12	0	0	12	100.00%	0.000500	0.000569	N/A	N/A	N/A	N/A
vocs - chloroform	12	0	0	12	100.00%	0.000853	0.000971	N/A	N/A	N/A	N/A
vocs - chloromethane	12	0	0	12	100.00%	0.00118	0.00134	N/A	N/A	N/A	N/A
vocs - cis-1,2-dichloroethene	12	0	0	12	100.00%	0.000559	0.000636	N/A	N/A	N/A	N/A
vocs - cis-1,3-dichloropropene	12	0	0	12	100.00%	0.000441	0.000502	N/A	N/A	N/A	N/A
vocs - dichlorodifluoromethane	12	0	0	12	100.00%	0.000716	0.000815	N/A	N/A	N/A	N/A
vocs - ethylbenzene	12	0	0	12	100.00%	0.000441	0.000502	N/A	N/A	N/A	N/A
vocs - methyl tert-butyl ether (mtbe)	12	0	0	12	100.00%	0.000598	0.000681	N/A	N/A	N/A	N/A
vocs - methylene chloride	12	0	0	12	100.00%	0.00490	0.00558	N/A	N/A	N/A	N/A
vocs - monochlorobenzene	12	0	0	12	100.00%	0.000294	0.000335	N/A	N/A	N/A	N/A
vocs - styrene	12	0	0	12	100.00%	0.000294	0.000335	N/A	N/A	N/A	N/A
vocs - tetrachloroethylene (pce)	12	0	0	12	100.00%	0.000725	0.000826	N/A	N/A	N/A	N/A
vocs - toluene	12	0	0	12	100.00%	0.000882	0.00100	N/A	N/A	N/A	N/A
vocs - trans-1,2-dichloroethene	12	0	0	12	100.00%	0.000490	0.000558	N/A	N/A	N/A	N/A
vocs - trans-1,3-dichloropropene	12	0	0	12	100.00%	0.000510	0.000580	N/A	N/A	N/A	N/A
vocs - tribromomethane	12	0	0	12	100.00%	0.000500	0.000569	N/A	N/A	N/A	N/A
vocs - trichloroethylene (tce)	12	0	0	12	100.00%	0.000275	0.000313	N/A	N/A	N/A	N/A
vocs - trichlorofluoromethane	12	0	0	12	100.00%	0.000490	0.000558	N/A	N/A	N/A	N/A
vocs - vinyl chloride	12	0	0	12	100.00%	0.000588	0.000670	N/A	N/A	N/A	N/A
vocs - xylenes, total	12	0	0	12	100.00%	0.000490	0.000558	N/A	N/A	N/A	N/A

General Statistics for Raw Data Sets using Detected Data Only

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
fluorinated alkyl substances - perfluorohexanesulfonic acid (pfhxs)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
fluorinated alkyl substances - perfluorooctanesulfonic acid (pfos)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
fluorinated alkyl substances - perfluorooctanoic acid (pfoa)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
general chemistry - 7 day leach - total dissolved solids	12	0	112	524	214.1	169.5	14358	120	28.9	1.98	0.560
general chemistry - cyanide, total	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
general chemistry - ph	12	0	7.70	8.4	8.15	8.2	0.0355	0.188	0.148	-1.18	0.0231
general chemistry - phenols, total	6	0	0.358	5.59	1.898	1.315	4.145	2.04	1.38	1.44	1.07
general chemistry - soluble - chloride	11	0	5.94	39.8	15.31	11.6	126.5	11.3	7.13	1.34	0.735
general chemistry - soluble - fluoride	12	0	2.98	8.3	5.173	5.45	2.652	1.63	1.76	0.512	0.315
general chemistry - soluble - nitrate as n	10	0	1.52	4.26	2.324	2.105	0.665	0.816	0.697	1.59	0.351
general chemistry - soluble - nitrate nitrite as n	4	0	1.56	4.39	3.283	3.59	1.76	1.33	1.09	-0.818	0.404
general chemistry - soluble - nitrite as n	2	0	1.15	2.34	1.745	1.745	0.708	0.841	0.882	N/A	0.482
general chemistry - soluble - sulfate	12	0	18.0	935	136.4	51.75	64974	255	38.4	3.31	1.87
mercury - mercury	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
metals - antimony	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
metals - arsenic	7	0	1.98	3.95	2.759	2.58	0.488	0.699	0.741	0.769	0.253
metals - barium	12	0	37.4	501	261.6	285.5	18724	137	81.5	-0.398	0.523
metals - beryllium	6	0	0.116	0.319	0.239	0.256	0.0073	0.0854	0.0927	-0.489	0.357
metals - cadmium	5	0	0.0289	0.0709	0.0527	0.0576	0.000326	0.0181	0.0197	-0.490	0.343
metals - chromium	6	0	2.05	5.08	3.945	4.24	1.535	1.24	1.14	-0.635	0.314
metals - copper	6	0	1.14	2.17	1.798	1.855	0.121	0.349	0.126	-1.62	0.194
metals - iron	12	0	1890	5330	3224	2765	1642917	1282	1171	0.831	0.398
metals - lead	12	0	1.30	4.5	2.48	2	1.336	1.16	0.89	0.892	0.466
metals - manganese	12	0	19.7	47	33.68	36.85	81.17	9.01	7.12	-0.320	0.268
metals - selenium	1	0	0.279	0.279	0.279	0.279	N/A	N/A	0	N/A	N/A
metals - silver	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
metals - thallium	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
metals - uranium	12	0	0.126	0.466	0.349	0.402	0.0152	0.123	0.0852	-0.959	0.353
metals - zinc	6	0	4.52	9.82	7.843	7.95	4.017	2.00	1.94	-0.836	0.256
nitroaromatics & nitramines - 2,4,6-trinitrotoluene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
nitroaromatics & nitramines - hexahydro-1,3,5-trinitro-1,3,5-triazine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
nitroaromatics & nitramines - octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - aldrin	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - chlordane (technical)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - ddt	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - dieldrin	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan i	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan ii	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan sulfate	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - endrin	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - endrin aldehyde	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - heptachlor	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - heptachlor epoxide	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, alpha-	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, beta-	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, delta-	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, gamma-	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - toxaphene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1016	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1221	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1232	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1242	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1248	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1254	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1260	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
perchlorate - perchlorate	8	0	0.000107	0.000223	0.000163	0.000149	0.00000000201	0.0000448	0.0000497	0.372	0.276
pesticides - prometon	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
radium-226 & other gamma emitters - combined radium 226/228	12	0	0.532	1.15	0.858	0.917	0.0324	0.180	0.110	-0.443	0.210
radium-226 & other gamma emitters - radium-226	11	0	0.297	1.09	0.663	0.722	0.0674	0.260	0.256	-0.0913	0.391
radium-226 & other gamma emitters - radium-228	6	0	0.176	0.583	0.337	0.262	0.0301	0.174	0.0993	0.787	0.516
svocs - 1,2,4,5-tetrachlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 1,2-diphenylhydrazine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 1-methylnaphthalene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,4,5-trichlorophenol	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,4,6-trichlorophenol	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,4-dichlorophenol	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,4-dinitro-o-cresol	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,4-dinitrotoluene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,6-dinitrotoluene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2-methylnaphthalene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - acenaphthene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - acenaphthylene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - anthracene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - atrazine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzidine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzo(a)anthracene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzo(a)pyrene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzo(b)fluoranthene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzo(g,h,i)perylene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzo(k)fluoranthene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - bis(2-chloroethyl)ether	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - bis(2-chloroisopropyl)ether	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - bis(2-ethylhexyl)phthalate	3	0	0.0537	0.203	0.142	0.169	0.00612	0.0783	0.0504	-1.37	0.551
svocs - chrysene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

svocs - dibenz(a,h)anthracene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - dibutylphthalate	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - dichlorobenzidine, 3,3'-	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - diethyl phthalate	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - dimethyl phthalate	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - dinitrophenols	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - fluoranthene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - fluorene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - hexachlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - hexachlorobutadiene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - hexachlorocyclopentadiene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - hexachloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - indeno(1,2,3-cd)pyrene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - isophorone	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - naphthalene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - nitrobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - n-nitrosodibutylamine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - n-nitrosodiethylamine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - n-nitrosodimethylamine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - n-nitrosodiphenylamine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - n-nitrosopyrrolidine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - pentachlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - pentachlorophenol	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - phenanthrene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - pyrene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
tph-dro & oro - dro (c10-c28)	2	0	56.9	72.3	64.6	64.6	119	10.9	11.4	N/A	0.169
tph-dro & oro - oro (c28-c36)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
tph-gro - gro (c6-c10)	1	0	0.0822	0.0822	0.0822	0.0822	N/A	N/A	0	N/A	N/A
vocs - 1,1,1-trichloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,1,2,2-tetrachloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,1,2-trichloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,1-dichloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,1-dichloroethylene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,1-dichloropropene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,2,4-trichlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,2-dibromoethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,2-dichlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,2-dichloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,2-dichloropropane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,3-dichlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,3-dichloropropene, total	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,4-dichlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,4-dioxane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - acrolein	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - acrylonitrile	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - benzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - bromodichloromethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - bromomethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - carbon tetrachloride	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - chloroform	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - chloromethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - cis-1,2-dichloroethene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - cis-1,3-dichloropropene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - dichlorodifluoromethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - ethylbenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - methyl tert-butyl ether (mtbe)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - methylene chloride	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - monochlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - styrene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - tetrachloroethylene (pce)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - toluene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - trans-1,2-dichloroethene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - trans-1,3-dichloropropene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - tribromomethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - trichloroethylene (tce)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - trichlorofluoromethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - vinyl chloride	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - xylenes, total	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
fluorinated alkyl substances - perfluorohexanesulfonic acid (pfhxs)	12	0	0.000260	0.000260	0.000260	0.000263	0.000266	0.000266	0.000269	0.000272	0.000274
fluorinated alkyl substances - perfluorooctanesulfonic acid (pfos)	12	0	0.000130	0.000130	0.000130	0.000132	0.000133	0.000133	0.000134	0.000135	0.000137
fluorinated alkyl substances - perfluorooctanoic acid (pfoa)	12	0	0.000213	0.000214	0.000214	0.000216	0.000218	0.000218	0.000221	0.000223	0.000225
general chemistry - 7 day leach - total dissolved solids	12	0	133	145	155	170	203	252	360	439	507
general chemistry - cyanide, total	12	0	0.165	0.171	0.175	0.194	0.207	0.207	0.207	0.211	0.215
general chemistry - ph	12	0	8.0	8.0	8.1	8.2	8.3	8.3	8.3	8.3	8.4
general chemistry - phenols, total	12	0	0.335	0.338	0.338	0.349	0.872	1.85	2.38	3.84	5.24
general chemistry - soluble - chloride	12	0	5.96	6.25	6.62	11.3	15.8	23.1	29.0	34.0	38.7
general chemistry - soluble - fluoride	12	0	3.25	3.70	4.07	5.45	5.72	5.77	7.35	7.87	8.21
general chemistry - soluble - nitrate as n	10	0	1.56	1.73	1.80	2.11	2.64	2.72	2.97	3.62	4.13
general chemistry - soluble - nitrate nitrite as n	12	0	1.70	3.19	3.93	4.93	4.98	4.99	5.07	5.10	5.13
general chemistry - soluble - nitrite as n	5	0	1.63	2.10	2.34	4.89	4.96	4.96	4.96	4.96	4.96
general chemistry - soluble - sulfate	12	0	24.1	31.5	40.9	51.8	95.2	117	155	508	850

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

mercury - mercury	12	0	0.0294	0.0295	0.0297	0.0303	0.0313	0.0319	0.0322	0.0322	0.0322
metals - antimony	12	0	0.172	0.181	0.185	1.11	1.86	1.87	1.88	1.90	1.93
metals - arsenic	12	0	2.13	2.57	2.58	3.46	3.73	3.74	3.85	3.90	3.94
metals - barium	12	0	51.8	135	225	286	337	344	366	428	486
metals - beryllium	12	0	0.175	0.231	0.277	0.337	0.373	0.374	0.376	0.381	0.385
metals - cadmium	12	0	0.0406	0.0540	0.0565	0.142	0.224	0.225	0.225	0.228	0.230
metals - chromium	12	0	3.16	3.64	3.88	4.20	4.49	4.81	4.94	5.00	5.07
metals - copper	12	0	1.81	1.85	1.86	2.86	3.73	3.74	3.76	3.81	3.85
metals - iron	12	0	1971	2084	2370	2765	3948	4646	5269	5319	5328
metals - lead	12	0	1.37	1.52	1.73	2.00	3.15	3.83	4.19	4.34	4.47
metals - manganese	12	0	23.0	23.6	24.0	36.9	39.8	40.8	41.5	44.0	46.4
metals - selenium	12	0	0.279	0.284	0.285	1.57	2.98	2.99	3.01	3.05	3.08
metals - silver	12	0	0.0645	0.0677	0.0693	0.416	0.699	0.702	0.704	0.713	0.721
metals - thallium	12	0	0.172	0.177	0.179	0.981	1.86	1.87	1.88	1.90	1.93
metals - uranium	12	0	0.160	0.220	0.282	0.402	0.435	0.451	0.461	0.463	0.465
metals - zinc	12	0	7.11	7.52	8.31	13.8	18.6	18.7	18.8	19.0	19.3
nitroaromatics & nitramines - 2,4,6-trinitrotoluene	12	0	0.0283	0.0286	0.0288	0.0291	0.0299	0.0299	0.0304	0.0304	0.0304
nitroaromatics & nitramines - hexahydro-1,3,5-trinitro-1,3,5-triazine	12	0	0.0397	0.0401	0.0403	0.0408	0.0418	0.0419	0.0425	0.0426	0.0426
nitroaromatics & nitramines - octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	12	0	0.0209	0.0212	0.0213	0.0215	0.0221	0.0221	0.0225	0.0225	0.0225
organochlorine pesticides - aldrin	12	0	0.000748	0.000751	0.000755	0.000774	0.000788	0.000790	0.000791	0.000795	0.000799
organochlorine pesticides - chlordane (technical)	12	0	0.0117	0.0117	0.0118	0.0121	0.0123	0.0123	0.0123	0.0124	0.0125
organochlorine pesticides - ddt	12	0	0.00110	0.00110	0.00111	0.00114	0.00116	0.00116	0.00116	0.00116	0.00117
organochlorine pesticides - dieldrin	12	0	0.00107	0.00107	0.00108	0.00111	0.00112	0.00113	0.00113	0.00113	0.00114
organochlorine pesticides - endosulfan i	12	0	0.00117	0.00117	0.00118	0.00121	0.00123	0.00123	0.00123	0.00124	0.00125
organochlorine pesticides - endosulfan ii	12	0	0.00144	0.00144	0.00145	0.00149	0.00151	0.00152	0.00152	0.00153	0.00154
organochlorine pesticides - endosulfan sulfate	12	0	0.00124	0.00125	0.00126	0.00129	0.00131	0.00131	0.00132	0.00132	0.00133
organochlorine pesticides - endrin	12	0	0.00184	0.00185	0.00187	0.00191	0.00194	0.00195	0.00195	0.00196	0.00198
organochlorine pesticides - endrin aldehyde	12	0	0.00127	0.00128	0.00129	0.00132	0.00134	0.00134	0.00135	0.00135	0.00136
organochlorine pesticides - heptachlor	12	0	0.00153	0.00154	0.00155	0.00159	0.00162	0.00162	0.00162	0.00163	0.00164
organochlorine pesticides - heptachlor epoxide	12	0	0.00140	0.00140	0.00141	0.00145	0.00147	0.00148	0.00148	0.00149	0.00150
organochlorine pesticides - hexachlorocyclohexane, alpha-	12	0	0.000883	0.000888	0.000892	0.000914	0.000931	0.000933	0.000935	0.000940	0.000945
organochlorine pesticides - hexachlorocyclohexane, beta-	12	0	0.00168	0.00169	0.00170	0.00174	0.00177	0.00178	0.00178	0.00179	0.00180
organochlorine pesticides - hexachlorocyclohexane, delta-	12	0	0.00164	0.00165	0.00166	0.00170	0.00173	0.00174	0.00174	0.00175	0.00176
organochlorine pesticides - hexachlorocyclohexane, gamma-	12	0	0.00174	0.00174	0.00176	0.00180	0.00183	0.00184	0.00184	0.00185	0.00186
organochlorine pesticides - toxaphene	12	0	0.0243	0.0244	0.0246	0.0251	0.0256	0.0257	0.0257	0.0258	0.0260
pcbs - aroclor 1016	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1221	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1232	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1242	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1248	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1254	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1260	12	0	0.00976	0.00981	0.00985	0.00990	0.0101	0.0102	0.0104	0.0105	0.0106
perchlorate - perchlorate	12	0	0.0000802	0.0000821	0.0000822	0.000128	0.000167	0.000190	0.000217	0.000221	0.000223
pesticides - prometon	11	0	0.0118	0.0118	0.0118	0.0119	0.0119	0.0119	0.0120	0.0120	0.0120
radium-226 & other gamma emitters - combined radium 226/228	12	0	0.626	0.687	0.733	0.917	0.973	0.982	0.987	1.06	1.13
radium-226 & other gamma emitters - radium-226	12	0	0.303	0.358	0.364	0.700	0.823	0.837	0.890	0.983	1.07
radium-226 & other gamma emitters - radium-228	12	0	0.0628	0.0946	0.109	0.195	0.310	0.320	0.502	0.549	0.576
svocs - 1,2,4,5-tetrachlorobenzene	11	0	0.0448	0.0462	0.0465	0.0476	0.0488	0.0488	0.0490	0.0490	0.0490
svocs - 1,2-diphenylhydrazine	11	0	0.0201	0.0208	0.0209	0.0214	0.0219	0.0219	0.0220	0.0220	0.0220
svocs - 1-methylnaphthalene	11	0	0.0102	0.0106	0.0107	0.0109	0.0112	0.0112	0.0112	0.0112	0.0112
svocs - 2,4,5-trichlorophenol	11	0	0.00915	0.00943	0.00948	0.00971	0.00997	0.00997	0.0100	0.0100	0.0100
svocs - 2,4,6-trichlorophenol	11	0	0.00915	0.00943	0.00948	0.00971	0.00997	0.00997	0.0100	0.0100	0.0100
svocs - 2,4-dichlorophenol	11	0	0.00915	0.00943	0.00948	0.00971	0.00999	0.0100	0.0100	0.0100	0.0100
svocs - 2,4-dinitro-o-cresol	11	0	0.302	0.311	0.313	0.320	0.329	0.329	0.330	0.330	0.330
svocs - 2,4-dinitrotoluene	11	0	0.0604	0.0623	0.0626	0.0641	0.0658	0.0658	0.0660	0.0660	0.0660
svocs - 2,6-dinitrotoluene	11	0	0.0256	0.0264	0.0266	0.0272	0.0279	0.0279	0.0280	0.0280	0.0280
svocs - 2-methylnaphthalene	11	0	0.0174	0.0179	0.018	0.0184	0.0189	0.0189	0.0190	0.0190	0.0190
svocs - acenaphthene	11	0	0.00942	0.00972	0.00977	0.0100	0.0103	0.0103	0.0103	0.0103	0.0103
svocs - acenaphthylene	11	0	0.0751	0.0775	0.0779	0.0797	0.0818	0.0818	0.0821	0.0821	0.0821

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

svocs - anthracene	11	0	0.0155	0.0160	0.0161	0.0165	0.0169	0.0169	0.0170	0.0170	0.0170
svocs - atrazine	11	0	0.0338	0.0349	0.0351	0.0359	0.0369	0.0369	0.0370	0.0370	0.0370
svocs - benzidine	11	0	0.905	0.934	0.939	0.961	0.987	0.987	0.990	0.990	0.990
svocs - benzo(a)anthracene	11	0	0.0183	0.0189	0.0190	0.0194	0.0199	0.0199	0.0200	0.0200	0.0200
svocs - benzo(a)pyrene	11	0	0.0183	0.0189	0.0190	0.0194	0.0199	0.0199	0.0200	0.0200	0.0200
svocs - benzo(b)fluoranthene	11	0	0.0240	0.0247	0.0249	0.0254	0.0261	0.0261	0.0262	0.0262	0.0262
svocs - benzo(g,h,i)perylene	11	0	0.0146	0.0151	0.0152	0.0155	0.0159	0.0159	0.0160	0.0160	0.0160
svocs - benzo(k)fluoranthene	11	0	0.0366	0.0377	0.0379	0.0388	0.0399	0.0399	0.0400	0.0400	0.0400
svocs - bis(2-chloroethyl)ether	11	0	0.0152	0.0157	0.0158	0.0161	0.0165	0.0165	0.0166	0.0166	0.0166
svocs - bis(2-chloroisopropyl)ether	11	0	0.0210	0.0217	0.0218	0.0223	0.0229	0.0229	0.0230	0.0230	0.0230
svocs - bis(2-ethylhexyl)phthalate	11	0	0.0421	0.0447	0.0452	0.0458	0.0499	0.0537	0.169	0.186	0.200
svocs - chrysene	11	0	0.0247	0.0255	0.0256	0.0262	0.0269	0.0269	0.0270	0.0270	0.0270
svocs - dibenz(a,h)anthracene	11	0	0.0174	0.0179	0.0180	0.0184	0.0189	0.0189	0.0190	0.0190	0.0190
svocs - dibutylphthalate	11	0	0.0265	0.0274	0.0275	0.0282	0.0289	0.0289	0.0290	0.0290	0.0290
svocs - dichlorobenzidine, 3,3'-	11	0	0.0823	0.0849	0.0853	0.0874	0.0897	0.0897	0.0900	0.0900	0.0900
svocs - diethyl phthalate	11	0	0.0238	0.0245	0.0247	0.0252	0.0259	0.0259	0.0260	0.0260	0.0260
svocs - dimethyl phthalate	11	0	0.0210	0.0217	0.0218	0.0223	0.0229	0.0229	0.0230	0.0230	0.0230
svocs - dinitrophenols	11	0	0.305	0.314	0.316	0.323	0.332	0.332	0.333	0.333	0.333
svocs - fluoranthene	11	0	0.0329	0.0340	0.0342	0.0350	0.0359	0.0359	0.0360	0.0360	0.0360
svocs - fluorene	11	0	0.0165	0.0170	0.0171	0.0175	0.0179	0.0179	0.0180	0.0180	0.0180
svocs - hexachlorobenzene	11	0	0.0265	0.0274	0.0275	0.0282	0.0289	0.0289	0.0290	0.0290	0.0290
svocs - hexachlorobutadiene	11	0	0.00915	0.00943	0.00948	0.00971	0.0100	0.0100	0.0100	0.0100	0.0100
svocs - hexachlorocyclopentadiene	11	0	0.102	0.105	0.106	0.108	0.111	0.111	0.111	0.111	0.111
svocs - hexachloroethane	11	0	0.0195	0.0201	0.0202	0.0207	0.0212	0.0212	0.0213	0.0213	0.0213
svocs - indeno(1,2,3-cd)pyrene	11	0	0.0201	0.0208	0.0209	0.0214	0.0219	0.0219	0.0220	0.0220	0.0220
svocs - isophorone	11	0	0.0155	0.0160	0.0161	0.0165	0.0169	0.0169	0.0170	0.0170	0.0170
svocs - naphthalene	11	0	0.0284	0.0292	0.0294	0.0301	0.0309	0.0309	0.0310	0.0310	0.0310
svocs - nitrobenzene	11	0	0.0201	0.0208	0.0209	0.0214	0.0219	0.0219	0.0220	0.0220	0.0220
svocs - n-nitrosodibutylamine	11	0	0.0884	0.0912	0.0917	0.0939	0.0964	0.0964	0.0967	0.0967	0.0967
svocs - n-nitrosodiethylamine	11	0	0.0595	0.0613	0.0616	0.0631	0.0648	0.0648	0.0650	0.0650	0.0650
svocs - n-nitrosodimethylamine	11	0	0.0338	0.0349	0.0351	0.0359	0.0369	0.0369	0.0370	0.0370	0.0370
svocs - n-nitrosodiphenylamine	11	0	0.0192	0.0198	0.0199	0.0204	0.0209	0.0209	0.0210	0.0210	0.0210
svocs - n-nitrosopyrrolidine	11	0	0.0585	0.0604	0.0607	0.0621	0.0638	0.0638	0.0640	0.0640	0.0640
svocs - pentachlorobenzene	11	0	0.0595	0.0613	0.0616	0.0631	0.0648	0.0648	0.0650	0.0650	0.0650
svocs - pentachlorophenol	11	0	0.302	0.311	0.313	0.320	0.329	0.329	0.330	0.330	0.330
svocs - phenanthrene	11	0	0.0155	0.0160	0.0161	0.0165	0.0169	0.0169	0.0170	0.0170	0.0170
svocs - pyrene	11	0	0.0111	0.0114	0.0115	0.0117	0.0121	0.0121	0.0121	0.0121	0.0121
tph-dro & oro - dro (c10-c28)	12	0	33.5	33.9	33.9	34.7	35.6	36.0	54.8	63.83	70.6
tph-dro & oro - oro (c28-c36)	12	0	33.5	33.6	33.8	34.6	35.2	35.3	35.4	35.76	36.1
tph-gro - gro (c6-c10)	12	0	0.0632	0.0635	0.0636	0.0647	0.0649	0.0650	0.0652	0.0729	0.0803
vocs - 1,1,1-trichloroethane	12	0	0.000491	0.000492	0.000496	0.000499	0.000500	0.000500	0.000501	0.000527	0.000552
vocs - 1,1,2,2-tetrachloroethane	12	0	0.000373	0.000374	0.000377	0.000379	0.000380	0.000380	0.000381	0.000400	0.000419
vocs - 1,1,2-trichloroethane	12	0	0.000491	0.000492	0.000496	0.000499	0.000500	0.000500	0.000501	0.000527	0.000552
vocs - 1,1-dichloroethane	12	0	0.000580	0.000581	0.000585	0.000589	0.000590	0.000590	0.000591	0.000621	0.000651
vocs - 1,1-dichloroethylene	12	0	0.000491	0.000492	0.000496	0.000499	0.000500	0.000500	0.000501	0.000527	0.000552
vocs - 1,1-dichloropropene	12	0	0.000511	0.000512	0.000516	0.000519	0.000520	0.000520	0.000521	0.000548	0.000574
vocs - 1,2,4-trichlorobenzene	12	0	0.000953	0.000955	0.000961	0.000968	0.000970	0.000970	0.000972	0.00102	0.00107
vocs - 1,2-dibromoethane	12	0	0.000295	0.000296	0.000297	0.000299	0.000300	0.000300	0.000301	0.000316	0.000331
vocs - 1,2-dichlorobenzene	12	0	0.000246	0.000247	0.000248	0.000250	0.000250	0.000250	0.000251	0.000264	0.000276
vocs - 1,2-dichloroethane	12	0	0.000511	0.000512	0.000516	0.000519	0.000520	0.000520	0.000521	0.000548	0.000574
vocs - 1,2-dichloropropane	12	0	0.000491	0.000492	0.000496	0.000499	0.000500	0.000500	0.000501	0.000527	0.000552
vocs - 1,3-dichlorobenzene	12	0	0.000305	0.000306	0.000307	0.000309	0.000310	0.000310	0.000311	0.000327	0.000342
vocs - 1,3-dichloropropene, total	12	0	0.000511	0.000512	0.000516	0.000519	0.000520	0.000520	0.000521	0.000548	0.000574
vocs - 1,4-dichlorobenzene	12	0	0.000314	0.000315	0.000317	0.000319	0.000320	0.000320	0.000321	0.000337	0.000353
vocs - 1,4-dioxane	12	0	0.0187	0.0187	0.0189	0.0190	0.0190	0.0190	0.0190	0.0200	0.0210
vocs - acrolein	12	0	0.00845	0.00847	0.00853	0.00858	0.00860	0.00860	0.00862	0.00906	0.00949
vocs - acrylonitrile	12	0	0.00354	0.00355	0.00357	0.00359	0.00360	0.00360	0.00361	0.00379	0.00397
vocs - benzene	12	0	0.000619	0.000620	0.000624	0.000629	0.000630	0.000630	0.000631	0.000663	0.000695
vocs - bromodichloromethane	12	0	0.000196	0.000197	0.000198	0.000200	0.000200	0.000200	0.000200	0.000210	0.000220
vocs - bromomethane	12	0	0.00108	0.00108	0.00109	0.00110	0.00110	0.00110	0.00110	0.00116	0.00122
vocs - carbon tetrachloride	12	0	0.000501	0.000502	0.000506	0.000509	0.000510	0.000510	0.000511	0.000537	0.000563
vocs - chloroform	12	0	0.000855	0.000857	0.000863	0.000868	0.000870	0.000870	0.000872	0.000917	0.000960
vocs - chloromethane	12	0	0.00118	0.00118	0.00119	0.00120	0.00120	0.00120	0.00120	0.00126	0.00132
vocs - cis-1,2-dichloroethene	12	0	0.000560	0.000561	0.000565	0.000569	0.000570	0.000570	0.000571	0.000600	0.000629
vocs - cis-1,3-dichloropropene	12	0	0.000442	0.000443	0.000446	0.000449	0.000450	0.000450	0.000451	0.000474	0.000496
vocs - dichlorodifluoromethane	12	0	0.000717	0.000719	0.000724	0.000729	0.000730	0.000730	0.000731	0.000769	0.000806
vocs - ethylbenzene	12	0	0.000442	0.000443	0.000446	0.000449	0.000450	0.000450	0.000451	0.000474	0.000496
vocs - methyl tert-butyl ether (mtbe)	12	0	0.000599	0.000600	0.000604	0.000609	0.000610	0.000610	0.000611	0.000643	0.000673
vocs - methylene chloride	12	0	0.00491	0.00492	0.00496	0.00499	0.00500	0.00500	0.00501	0.00527	0.00552
vocs - monochlorobenzene	12	0	0.000295	0.000296	0.000297	0.000299	0.000300	0.000300	0.000301	0.000316	0.000331
vocs - styrene	12	0	0.000295	0.000296	0.000297	0.000299	0.000300	0.000300	0.000301	0.000316	0.000331
vocs - tetrachloroethylene (pce)	12	0	0.000727	0.000729	0.000734	0.000739	0.000740	0.000740	0.000741	0.000779	0.000817
vocs - toluene	12	0	0.000884	0.000886	0.000892	0.000898	0.000900	0.000900	0.000902	0.000946	0.000989
vocs - trans-1,2-dichloroethene	12	0	0.000491	0.000492	0.000496	0.000499	0.000500	0.000500	0.000501	0.000527	0.000552
vocs - trans-1,3-dichloropropene	12	0	0.000511	0.000512	0.000516	0.000519	0.000520	0.000520	0.000521	0.000548	0.000574
vocs - tribromomethane	12	0	0.000501	0.000502	0.000506	0.000509	0.000510	0.000510	0.000511	0.000537	0.000563
vocs - trichloroethylene (tce)	12	0	0.000275	0.000276	0.000277	0.000279	0.000280	0.000280	0.000281	0.000295	0.000309
vocs - trichlorofluoromethane	12	0	0.000491	0.000492	0.000496	0.000499	0.000500	0.000500	0.000501	0.000527	0.000552
vocs - vinyl chloride	12	0	0.000589	0.000590	0.000594	0.000599	0.000600	0.000600	0.000601	0.000632	0.000662
vocs - xylenes, total	12	0	0.000491	0.000492	0.000496	0.000499	0.000500	0.000500	0.000501	0.000527	0.000552

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.17/25/2021 11:22:36 AM

User Selected Options

From File WorkSheet.xls
Full Precision OFF

From File: WorkSheet.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
fluorinated alkyl substances - perfluorohexanesulfonic acid (pfhxs)	12	0	0	12	100.00%	0.000255	0.000275	N/A	N/A	N/A	N/A
fluorinated alkyl substances - perfluorooctanesulfonic acid (pfos)	12	0	0	12	100.00%	0.000128	0.000137	N/A	N/A	N/A	N/A
fluorinated alkyl substances - perfluorooctanoic acid (pfoa)	12	0	0	12	100.00%	0.000210	0.000226	N/A	N/A	N/A	N/A
general chemistry - 7 day leach - total dissolved solids	10	0	10	0	0.00%	NA	NA	168	1764	42	0.251
general chemistry - cyanide, total	12	0	0	12	100.00%	0.164	0.216	N/A	N/A	N/A	N/A
general chemistry - ph	12	0	12	0	0.00%	N/A	N/A	8.15	0.0355	0.188	0.0231
general chemistry - phenols, total	11	0	5	6	54.55%	0.334	0.338	0.71	0.57	0.75	1.06
general chemistry - soluble - chloride	12	0	11	1	8.33%	4.82	4.82	14.4	114	10.7	0.739
general chemistry - soluble - fluoride	12	0	12	0	0.00%	N/A	N/A	5.17	2.65	1.63	0.315
general chemistry - soluble - nitrate as n	9	0	9	0	0.00%	NA	NA	2.11	0.228	0.477	0.226
general chemistry - soluble - nitrate nitrite as n	12	0	4	8	66.67%	0.277	5.13	2.68	2.50	1.58	0.590
general chemistry - soluble - nitrite as n	5	0	2	3	60.00%	4.89	4.96	1.75	0.354	0.595	0.341
general chemistry - soluble - sulfate	11	0	11	0	0.00%	N/A	N/A	63.8	1892	43.5	0.682
mercury - mercury	12	0	0	12	100.00%	0.0290	0.0322	N/A	N/A	N/A	N/A
metals - antimony	12	0	0	12	100.00%	0.171	1.93	N/A	N/A	N/A	N/A
metals - arsenic	12	0	7	5	41.67%	3.55	3.86	2.68	0.342	0.585	0.219
metals - barium	12	0	12	0	0.00%	N/A	N/A	262	18724	137	0.523
metals - beryllium	12	0	6	6	50.00%	0.355	0.386	0.239	0.00608	0.0780	0.326
metals - cadmium	12	0	5	7	58.33%	0.0531	0.231	0.0496	0.000270	0.0164	0.332
metals - chromium	12	0	6	6	50.00%	3.99	4.34	3.43	1.11	1.05	0.307
metals - copper	12	0	6	6	50.00%	3.55	3.86	1.80	0.101	0.318	0.177
metals - iron	12	0	12	0	0.00%	N/A	N/A	3224	1642917	1282	0.398
metals - lead	12	0	12	0	0.00%	N/A	N/A	2.48	1.34	1.16	0.466
metals - manganese	12	0	12	0	0.00%	N/A	N/A	33.7	81.2	9.01	0.268
metals - selenium	12	0	1	11	91.67%	0.274	3.09	0.277	0.00000625	0.00250	0.00904
metals - silver	12	0	0	12	100.00%	0.0641	0.723	N/A	N/A	N/A	N/A
metals - thallium	12	0	0	12	100.00%	0.171	1.93	N/A	N/A	N/A	N/A
metals - uranium	12	0	12	0	0.00%	N/A	N/A	0.349	0.0152	0.123	0.353
metals - zinc	12	0	6	6	50.00%	17.7	19.3	7.84	3.35	1.83	0.233
nitroaromatics & nitramines - 2,4,6-trinitrotoluene	12	0	0	12	100.00%	0.0280	0.0304	N/A	N/A	N/A	N/A
nitroaromatics & nitramines - hexahydro-1,3,5-trinitro-1,3,5-triazine	12	0	0	12	100.00%	0.0392	0.0426	N/A	N/A	N/A	N/A
nitroaromatics & nitramines - octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	12	0	0	12	100.00%	0.0207	0.0225	N/A	N/A	N/A	N/A
organochlorine pesticides - aldrin	12	0	0	12	100.00%	0.000744	0.000800	N/A	N/A	N/A	N/A
organochlorine pesticides - chlordane (technical)	12	0	0	12	100.00%	0.0116	0.0125	N/A	N/A	N/A	N/A
organochlorine pesticides - ddt	12	0	0	12	100.00%	0.00109	0.00117	N/A	N/A	N/A	N/A
organochlorine pesticides - dieldrin	12	0	0	12	100.00%	0.00106	0.00114	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan i	12	0	0	12	100.00%	0.00116	0.00125	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan ii	12	0	0	12	100.00%	0.00143	0.00154	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan sulfate	12	0	0	12	100.00%	0.00124	0.00133	N/A	N/A	N/A	N/A
organochlorine pesticides - endrin	12	0	0	12	100.00%	0.00184	0.00198	N/A	N/A	N/A	N/A
organochlorine pesticides - endrin aldehyde	12	0	0	12	100.00%	0.00127	0.00136	N/A	N/A	N/A	N/A
organochlorine pesticides - heptachlor	12	0	0	12	100.00%	0.00153	0.00164	N/A	N/A	N/A	N/A
organochlorine pesticides - heptachlor epoxide	12	0	0	12	100.00%	0.00139	0.00150	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, alpha-	12	0	0	12	100.00%	0.000879	0.000946	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, beta-	12	0	0	12	100.00%	0.00167	0.00180	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, delta-	12	0	0	12	100.00%	0.00163	0.00176	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, gamma-	12	0	0	12	100.00%	0.00173	0.00186	N/A	N/A	N/A	N/A
organochlorine pesticides - toxaphene	12	0	0	12	100.00%	0.0242	0.0260	N/A	N/A	N/A	N/A
pcbs - aroclor 1016	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1221	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1232	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1242	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1248	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1254	12	0	0	12	100.00%	0.00481	0.00542	N/A	N/A	N/A	N/A
pcbs - aroclor 1260	12	0	0	12	100.00%	0.00943	0.0106	N/A	N/A	N/A	N/A
perchlorate - perchlorate	12	0	8	4	33.33%	0.0000800	0.0000822	0.000135	0.00000000269	0.0000519	0.384
pesticides - prometon	11	0	0	11	100.00%	0.0117	0.0120	N/A	N/A	N/A	N/A
radium-226 & other gamma emitters - combined radium 226/228	12	0	12	0	0.00%	N/A	N/A	0.858	0.0324	0.180	0.210
radium-226 & other gamma emitters - radium-226	12	0	11	1	8.33%	0.171	0.171	0.622	0.0747	0.273	0.439
radium-226 & other gamma emitters - radium-228	12	0	6	6	50.00%	0.0506	0.324	0.200	0.0323	0.180	0.898
svocs - 1,2,4,5-tetrachlorobenzene	11	0	0	11	100.00%	0.0448	0.0490	N/A	N/A	N/A	N/A
svocs - 1,2-diphenylhydrazine	11	0	0	11	100.00%	0.0201	0.0220	N/A	N/A	N/A	N/A
svocs - 1-methylnaphthalene	11	0	0	11	100.00%	0.0102	0.0112	N/A	N/A	N/A	N/A
svocs - 2,4,5-trichlorophenol	11	0	0	11	100.00%	0.00915	0.0100	N/A	N/A	N/A	N/A
svocs - 2,4,6-trichlorophenol	11	0	0	11	100.00%	0.00915	0.0100	N/A	N/A	N/A	N/A
svocs - 2,4-dichlorophenol	11	0	0	11	100.00%	0.00915	0.0100	N/A	N/A	N/A	N/A

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

svocs - 2,4-dinitro-o-cresol	11	0	0	11	100.00%	0.302	0.330	N/A	N/A	N/A	N/A
svocs - 2,4-dinitrotoluene	11	0	0	11	100.00%	0.0604	0.0660	N/A	N/A	N/A	N/A
svocs - 2,6-dinitrotoluene	11	0	0	11	100.00%	0.0256	0.0280	N/A	N/A	N/A	N/A
svocs - 2-methylnaphthalene	11	0	0	11	100.00%	0.0174	0.0190	N/A	N/A	N/A	N/A
svocs - acenaphthene	11	0	0	11	100.00%	0.00942	0.0103	N/A	N/A	N/A	N/A
svocs - acenaphthylene	11	0	0	11	100.00%	0.0751	0.0821	N/A	N/A	N/A	N/A
svocs - anthracene	11	0	0	11	100.00%	0.0155	0.0170	N/A	N/A	N/A	N/A
svocs - atrazine	11	0	0	11	100.00%	0.0338	0.0370	N/A	N/A	N/A	N/A
svocs - benzidine	11	0	0	11	100.00%	0.905	0.990	N/A	N/A	N/A	N/A
svocs - benzo(a)anthracene	11	0	0	11	100.00%	0.0183	0.0200	N/A	N/A	N/A	N/A
svocs - benzo(a)pyrene	11	0	0	11	100.00%	0.0183	0.0200	N/A	N/A	N/A	N/A
svocs - benzo(b)fluoranthene	11	0	0	11	100.00%	0.0240	0.0262	N/A	N/A	N/A	N/A
svocs - benzo(g,h,i)perylene	11	0	0	11	100.00%	0.0146	0.0160	N/A	N/A	N/A	N/A
svocs - benzo(k)fluoranthene	11	0	0	11	100.00%	0.0366	0.0400	N/A	N/A	N/A	N/A
svocs - bis(2-chloroethyl)ether	11	0	0	11	100.00%	0.0152	0.0166	N/A	N/A	N/A	N/A
svocs - bis(2-chloroisopropyl)ether	11	0	0	11	100.00%	0.0210	0.0230	N/A	N/A	N/A	N/A
svocs - bis(2-ethylhexyl)phthalate	9	0	1	8	88.89%	0.0421	0.0460	0.0434	0.00001329	0.00365	0.084
svocs - chrysene	11	0	0	11	100.00%	0.0247	0.0270	N/A	N/A	N/A	N/A
svocs - dibenz(a,h)anthracene	11	0	0	11	100.00%	0.0174	0.0190	N/A	N/A	N/A	N/A
svocs - dibutylphthalate	11	0	0	11	100.00%	0.0265	0.0290	N/A	N/A	N/A	N/A
svocs - dichlorobenzidine, 3,3'-	11	0	0	11	100.00%	0.0823	0.0900	N/A	N/A	N/A	N/A
svocs - diethyl phthalate	11	0	0	11	100.00%	0.0238	0.0260	N/A	N/A	N/A	N/A
svocs - dimethyl phthalate	11	0	0	11	100.00%	0.0210	0.0230	N/A	N/A	N/A	N/A
svocs - dinitrophenols	11	0	0	11	100.00%	0.305	0.333	N/A	N/A	N/A	N/A
svocs - fluoranthene	11	0	0	11	100.00%	0.0329	0.0360	N/A	N/A	N/A	N/A
svocs - fluorene	11	0	0	11	100.00%	0.0165	0.0180	N/A	N/A	N/A	N/A
svocs - hexachlorobenzene	11	0	0	11	100.00%	0.0265	0.0290	N/A	N/A	N/A	N/A
svocs - hexachlorobutadiene	11	0	0	11	100.00%	0.00915	0.0100	N/A	N/A	N/A	N/A
svocs - hexachlorocyclopentadiene	11	0	0	11	100.00%	0.102	0.111	N/A	N/A	N/A	N/A
svocs - hexachloroethane	11	0	0	11	100.00%	0.0195	0.0213	N/A	N/A	N/A	N/A
svocs - indeno(1,2,3-cd)pyrene	11	0	0	11	100.00%	0.0201	0.0220	N/A	N/A	N/A	N/A
svocs - isophorone	11	0	0	11	100.00%	0.0155	0.0170	N/A	N/A	N/A	N/A
svocs - naphthalene	11	0	0	11	100.00%	0.0284	0.0310	N/A	N/A	N/A	N/A
svocs - nitrobenzene	11	0	0	11	100.00%	0.0201	0.0220	N/A	N/A	N/A	N/A
svocs - n-nitrosodibutylamine	11	0	0	11	100.00%	0.0884	0.0967	N/A	N/A	N/A	N/A
svocs - n-nitrosodiethylamine	11	0	0	11	100.00%	0.0595	0.0650	N/A	N/A	N/A	N/A
svocs - n-nitrosodimethylamine	11	0	0	11	100.00%	0.0338	0.0370	N/A	N/A	N/A	N/A
svocs - n-nitrosodiphenylamine	11	0	0	11	100.00%	0.0192	0.0210	N/A	N/A	N/A	N/A
svocs - n-nitrosopyrrolidine	11	0	0	11	100.00%	0.0585	0.0640	N/A	N/A	N/A	N/A
svocs - pentachlorobenzene	11	0	0	11	100.00%	0.0595	0.0650	N/A	N/A	N/A	N/A
svocs - pentachlorophenol	11	0	0	11	100.00%	0.302	0.330	N/A	N/A	N/A	N/A
svocs - phenanthrene	11	0	0	11	100.00%	0.0155	0.0170	N/A	N/A	N/A	N/A
svocs - pyrene	11	0	0	11	100.00%	0.0111	0.0121	N/A	N/A	N/A	N/A
tph-dro & oro - dro (c10-c28)	10	0	0	10	100.00%	33.2	36.2	N/A	N/A	N/A	N/A
tph-dro & oro - oro (c28-c36)	12	0	0	12	100.00%	33.2	36.2	N/A	N/A	N/A	N/A
tph-gro - gro (c6-c10)	12	0	1	11	91.67%	0.0629	0.0652	0.0645	0.0000285	0.00533	0.0827
vocs - 1,1,1-trichloroethane	11	0	0	11	100.00%	0.000490	0.000501	N/A	N/A	N/A	N/A
vocs - 1,1,2,2-tetrachloroethane	11	0	0	11	100.00%	0.000373	0.000381	N/A	N/A	N/A	N/A
vocs - 1,1,2-trichloroethane	11	0	0	11	100.00%	0.000490	0.000501	N/A	N/A	N/A	N/A
vocs - 1,1-dichloroethane	11	0	0	11	100.00%	0.000578	0.000591	N/A	N/A	N/A	N/A
vocs - 1,1-dichloroethylene	11	0	0	11	100.00%	0.000490	0.000501	N/A	N/A	N/A	N/A
vocs - 1,1-dichloropropene	11	0	0	11	100.00%	0.000510	0.000521	N/A	N/A	N/A	N/A
vocs - 1,2,4-trichlorobenzene	11	0	0	11	100.00%	0.000951	0.000972	N/A	N/A	N/A	N/A
vocs - 1,2-dibromoethane	11	0	0	11	100.00%	0.000294	0.000301	N/A	N/A	N/A	N/A
vocs - 1,2-dichlorobenzene	11	0	0	11	100.00%	0.000245	0.000251	N/A	N/A	N/A	N/A
vocs - 1,2-dichloroethane	11	0	0	11	100.00%	0.000510	0.000521	N/A	N/A	N/A	N/A
vocs - 1,2-dichloropropane	11	0	0	11	100.00%	0.000490	0.000501	N/A	N/A	N/A	N/A
vocs - 1,3-dichlorobenzene	11	0	0	11	100.00%	0.000304	0.000311	N/A	N/A	N/A	N/A
vocs - 1,3-dichloropropene, total	11	0	0	11	100.00%	0.000510	0.000521	N/A	N/A	N/A	N/A
vocs - 1,4-dichlorobenzene	11	0	0	11	100.00%	0.000314	0.000321	N/A	N/A	N/A	N/A
vocs - 1,4-dioxane	11	0	0	11	100.00%	0.0186	0.0190	N/A	N/A	N/A	N/A
vocs - acrolein	11	0	0	11	100.00%	0.00843	0.00862	N/A	N/A	N/A	N/A
vocs - acrylonitrile	11	0	0	11	100.00%	0.00353	0.00361	N/A	N/A	N/A	N/A
vocs - benzene	11	0	0	11	100.00%	0.000618	0.000631	N/A	N/A	N/A	N/A
vocs - bromodichloromethane	11	0	0	11	100.00%	0.000196	0.000200	N/A	N/A	N/A	N/A
vocs - bromomethane	11	0	0	11	100.00%	0.00108	0.00110	N/A	N/A	N/A	N/A
vocs - carbon tetrachloride	11	0	0	11	100.00%	0.000500	0.000511	N/A	N/A	N/A	N/A
vocs - chloroform	11	0	0	11	100.00%	0.000853	0.000872	N/A	N/A	N/A	N/A
vocs - chloromethane	11	0	0	11	100.00%	0.00118	0.00120	N/A	N/A	N/A	N/A
vocs - cis-1,2-dichloroethene	11	0	0	11	100.00%	0.000559	0.000571	N/A	N/A	N/A	N/A
vocs - cis-1,3-dichloropropene	11	0	0	11	100.00%	0.000441	0.000451	N/A	N/A	N/A	N/A
vocs - dichlorodifluoromethane	11	0	0	11	100.00%	0.000716	0.000731	N/A	N/A	N/A	N/A
vocs - ethylbenzene	11	0	0	11	100.00%	0.000441	0.000451	N/A	N/A	N/A	N/A
vocs - methyl tert-butyl ether (mtbe)	11	0	0	11	100.00%	0.000598	0.000611	N/A	N/A	N/A	N/A
vocs - methylene chloride	11	0	0	11	100.00%	0.00490	0.00501	N/A	N/A	N/A	N/A
vocs - monochlorobenzene	11	0	0	11	100.00%	0.000294	0.000301	N/A	N/A	N/A	N/A
vocs - styrene	11	0	0	11	100.00%	0.000294	0.000301	N/A	N/A	N/A	N/A

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

vocs - tetrachloroethylene (pce)	11	0	0	11	100.00%	0.000725	0.000741	N/A	N/A	N/A	N/A
vocs - toluene	11	0	0	11	100.00%	0.000882	0.000902	N/A	N/A	N/A	N/A
vocs - trans-1,2-dichloroethene	11	0	0	11	100.00%	0.000490	0.000501	N/A	N/A	N/A	N/A
vocs - trans-1,3-dichloropropene	11	0	0	11	100.00%	0.000510	0.000521	N/A	N/A	N/A	N/A
vocs - tribromomethane	11	0	0	11	100.00%	0.000500	0.000511	N/A	N/A	N/A	N/A
vocs - trichloroethylene (tce)	11	0	0	11	100.00%	0.000275	0.000281	N/A	N/A	N/A	N/A
vocs - trichlorofluoromethane	11	0	0	11	100.00%	0.000490	0.000501	N/A	N/A	N/A	N/A
vocs - vinyl chloride	11	0	0	11	100.00%	0.000588	0.000601	N/A	N/A	N/A	N/A
vocs - xylenes, total	11	0	0	11	100.00%	0.000490	0.000501	N/A	N/A	N/A	N/A

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
fluorinated alkyl substances - perfluorohexanesulfonic acid (pfhxs)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
fluorinated alkyl substances - perfluorooctanesulfonic acid (pfos)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
fluorinated alkyl substances - perfluorooctanoic acid (pfoa)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
general chemistry - 7 day leach - total dissolved solids	10	0	112	270	168	166	1764	42	18.5	1.58	0.251
general chemistry - cyanide, total	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
general chemistry - ph	12	0	7.7	8.4	8.15	8.2	0.0355	0.188	0.148	-1.18	0.0231
general chemistry - phenols, total	5	0	0.358	2.4	1.16	0.43	1.09	1.04	0.11	0.63	0.90
general chemistry - soluble - chloride	11	0	5.94	39.8	15.3	11.6	127	11.3	7.13	1.34	0.735
general chemistry - soluble - fluoride	12	0	2.98	8.30	5.17	5.45	2.65	1.63	1.76	0.512	0.315
general chemistry - soluble - nitrate as n	9	0	1.52	2.83	2.11	2.05	0.228	0.477	0.667	0.32	0.226
general chemistry - soluble - nitrate nitrite as n	4	0	1.56	4.39	3.28	3.59	1.76	1.33	1.09	-0.818	0.404
general chemistry - soluble - nitrite as n	2	0	1.15	2.34	1.75	1.75	0.708	0.841	0.882	N/A	0.482
general chemistry - soluble - sulfate	11	0	18.0	158	63.8	51.1	1892	43.5	34.1	1.27	0.682
mercury - mercury	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
metals - antimony	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
metals - arsenic	7	0	1.98	3.95	2.76	2.58	0.488	0.699	0.741	0.769	0.253
metals - barium	12	0	37.4	501	262	286	18724	137	81.5	-0.398	0.523
metals - beryllium	6	0	0.116	0.319	0.239	0.256	0.00730	0.0854	0.0927	-0.489	0.357
metals - cadmium	5	0	0.0289	0.0709	0.0527	0.0576	0.000326	0.0181	0.0197	-0.490	0.343
metals - chromium	6	0	2.05	5.08	3.95	4.24	1.54	1.24	1.14	-0.635	0.314
metals - copper	6	0	1.14	2.17	1.80	1.86	0.121	0.349	0.126	-1.62	0.194
metals - iron	12	0	1890	5330	3224	2765	1642917	1282	1171	0.831	0.398
metals - lead	12	0	1.30	4.50	2.48	2.00	1.34	1.16	0.890	0.892	0.466
metals - manganese	12	0	19.7	47.0	33.7	36.9	81.2	9.01	7.12	-0.320	0.268
metals - selenium	1	0	0.279	0.279	0.279	0.279	N/A	N/A	0	N/A	N/A
metals - silver	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
metals - thallium	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
metals - uranium	12	0	0.126	0.466	0.349	0.402	0.0152	0.123	0.0852	-0.959	0.353
metals - zinc	6	0	4.52	9.82	7.84	7.95	4.02	2.00	1.94	-0.836	0.256
nitroaromatics & nitramines - 2,4,6-trinitrotoluene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
nitroaromatics & nitramines - hexahydro-1,3,5-trinitro-1,3,5-triazine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
nitroaromatics & nitramines - octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - aldrin	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - chlordane (technical)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - ddt	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - dieldrin	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan i	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan ii	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - endosulfan sulfate	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - endrin	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - endrin aldehyde	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - heptachlor	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - heptachlor epoxide	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, alpha-	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, beta-	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, delta-	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - hexachlorocyclohexane, gamma-	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
organochlorine pesticides - toxaphene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1016	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1221	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1232	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1242	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1248	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1254	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pcbs - aroclor 1260	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
perchlorate - perchlorate	8	0	0.000107	0.000223	0.000163	0.000149	0.00000000201	0.0000448	0.0000497	0.372	0.276
pesticides - prometon	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
radium-226 & other gamma emitters - combined radium 226/228	12	0	0.532	1.15	0.858	0.917	0.0324	0.180	0.110	-0.443	0.210
radium-226 & other gamma emitters - radium-226	11	0	0.297	1.09	0.663	0.722	0.0674	0.260	0.256	-0.0913	0.391
radium-226 & other gamma emitters - radium-228	6	0	0.176	0.583	0.337	0.262	0.0301	0.174	0.0993	0.787	0.516
svocs - 1,2,4,5-tetrachlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 1,2-diphenylhydrazine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 1-methylnaphthalene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,4,5-trichlorophenol	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

svocs - 2,4,6-trichlorophenol	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,4-dichlorophenol	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,4-dinitro-o-cresol	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,4-dinitrotoluene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2,6-dinitrotoluene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - 2-methylnaphthalene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - acenaphthene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - acenaphthylene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - anthracene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - atrazine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzidine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzo(a)anthracene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzo(a)pyrene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzo(b)fluoranthene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzo(g,h,i)perylene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - benzo(k)fluoranthene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - bis(2-chloroethyl)ether	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - bis(2-chloroisopropyl)ether	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - bis(2-ethylhexyl)phthalate	1	0	0.0537	0.0537	0.0537	0.0537	N/A	N/A	0	N/A	N/A
svocs - chrysene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - dibenz(a,h)anthracene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - dibutylphthalate	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - dichlorobenzidine, 3,3'-	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - diethyl phthalate	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - dimethyl phthalate	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - dinitrophenols	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - fluoranthene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - fluorene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - hexachlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - hexachlorobutadiene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - hexachlorocyclopentadiene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - hexachloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - indeno(1,2,3-cd)pyrene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - isophorone	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - naphthalene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - nitrobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - n-nitrosodibutylamine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - n-nitrosodiethylamine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - n-nitrosodimethylamine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - n-nitrosodiphenylamine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - n-nitrosopyrrolidine	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - pentachlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - pentachlorophenol	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - phenanthrene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
svocs - pyrene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
tph-dro & oro - dro (c10-c28)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
tph-dro & oro - oro (c28-c36)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
tph-gro - gro (c6-c10)	1	0	0.0822	0.0822	0.0822	0.0822	N/A	N/A	0	N/A	N/A
vocs - 1,1,1-trichloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,1,2,2-tetrachloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,1,2-trichloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,1-dichloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,1-dichloroethylene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,1-dichloropropene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,2,4-trichlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,2-dibromoethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,2-dichlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,2-dichloroethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,2-dichloropropane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,3-dichlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,3-dichloropropene, total	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,4-dichlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - 1,4-dioxane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - acrolein	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - acrylonitrile	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - benzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - bromodichloromethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - bromomethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - carbon tetrachloride	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - chloroform	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - chloromethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - cis-1,2-dichloroethene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - cis-1,3-dichloropropene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - dichlorodifluoromethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - ethylbenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - methyl tert-butyl ether (mtbe)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - methylene chloride	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

vocs - monochlorobenzene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - styrene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - tetrachloroethylene (pce)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - toluene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - trans-1,2-dichloroethene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - trans-1,3-dichloropropene	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - tribromomethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - trichloroethylene (tce)	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - trichlorofluoromethane	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - vinyl chloride	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vocs - xylenes, total	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
fluorinated alkyl substances - perfluorohexanesulfonic acid (pfhxs)	12	0	0.000260	0.000260	0.000260	0.000263	0.000266	0.000266	0.000269	0.000272	0.000274
fluorinated alkyl substances - perfluorooctanesulfonic acid (pfos)	12	0	0.000130	0.000130	0.000130	0.000132	0.000133	0.000133	0.000134	0.000135	0.000137
fluorinated alkyl substances - perfluorooctanoic acid (pfoa)	12	0	0.000213	0.000214	0.000214	0.000216	0.000218	0.000218	0.000221	0.000223	0.000225
general chemistry - 7 day leach - total dissolved solids	10	0	130	139	146	166	176	177.6	189	230	262
general chemistry - cyanide, total	12	0	0.165	0.171	0.175	0.194	0.207	0.207	0.207	0.211	0.215
general chemistry - ph	12	0	8.0	8.0	8.1	8.2	8.3	8.3	8.3	8.35	8.39
general chemistry - phenols, total	11	0	0.335	0.338	0.338	0.338	0.419	0.43	2.2	2.30	2.38
general chemistry - soluble - chloride	12	0	5.96	6.25	6.62	11.3	15.8	23.1	29.0	34.0	38.7
general chemistry - soluble - fluoride	12	0	3.25	3.70	4.07	5.45	5.72	5.77	7.35	7.87	8.21
general chemistry - soluble - nitrate as n	9	0	1.55	1.69	1.77	2.05	2.50	2.58	2.72	2.77	2.82
general chemistry - soluble - nitrate nitrite as n	12	0	1.70	3.19	3.93	4.93	4.98	4.99	5.07	5.10	5.13
general chemistry - soluble - nitrite as n	5	0	1.63	2.10	2.34	4.89	4.96	4.96	4.96	4.96	4.96
general chemistry - soluble - sulfate	11	0	23.6	28.1	36.6	51.1	75.3	85.3	125	142	155
mercury - mercury	12	0	0.0294	0.0295	0.0297	0.0303	0.0313	0.0319	0.0322	0.0322	0.0322
metals - antimony	12	0	0.172	0.181	0.185	1.11	1.86	1.87	1.88	1.90	1.93
metals - arsenic	12	0	2.13	2.57	2.58	3.46	3.73	3.74	3.85	3.90	3.94
metals - barium	12	0	51.8	135	225	286	337	344	366	428	486
metals - beryllium	12	0	0.175	0.231	0.277	0.337	0.373	0.374	0.376	0.381	0.385
metals - cadmium	12	0	0.0406	0.0540	0.0565	0.142	0.224	0.225	0.225	0.228	0.230
metals - chromium	12	0	3.16	3.64	3.88	4.20	4.49	4.81	4.94	5.00	5.07
metals - copper	12	0	1.81	1.85	1.86	2.86	3.73	3.74	3.76	3.81	3.85
metals - iron	12	0	1971	2084	2370	2765	3948	4646	5269	5319	5328
metals - lead	12	0	1.37	1.52	1.73	2.00	3.15	3.83	4.19	4.34	4.47
metals - manganese	12	0	23.0	23.6	24.0	36.9	39.8	40.8	41.5	44.0	46.4
metals - selenium	12	0	0.279	0.284	0.285	1.57	2.98	2.99	3.01	3.05	3.08
metals - silver	12	0	0.0645	0.0677	0.0693	0.416	0.699	0.702	0.704	0.713	0.721
metals - thallium	12	0	0.172	0.177	0.179	0.981	1.86	1.87	1.88	1.90	1.93
metals - uranium	12	0	0.160	0.220	0.282	0.402	0.435	0.451	0.461	0.463	0.465
metals - zinc	12	0	7.11	7.52	8.31	13.8	18.6	18.7	18.8	19.0	19.3
nitroaromatics & nitramines - 2,4,6-trinitrotoluene	12	0	0.0283	0.0286	0.0288	0.0291	0.0299	0.0299	0.0304	0.0304	0.0304
nitroaromatics & nitramines - hexahydro-1,3,5-trinitro-1,3,5-triazine	12	0	0.0397	0.0401	0.0403	0.0408	0.0418	0.0419	0.0425	0.0426	0.0426
nitroaromatics & nitramines - octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	12	0	0.0209	0.0212	0.0213	0.0215	0.0221	0.0221	0.0225	0.0225	0.0225
organochlorine pesticides - aldrin	12	0	0.000748	0.000751	0.000755	0.000774	0.000788	0.000790	0.000791	0.000795	0.000799
organochlorine pesticides - chlordane (technical)	12	0	0.0117	0.0117	0.0118	0.0121	0.0123	0.0123	0.0123	0.0124	0.0125
organochlorine pesticides - ddt	12	0	0.00110	0.00110	0.00111	0.00114	0.00116	0.00116	0.00116	0.00116	0.00117
organochlorine pesticides - dieldrin	12	0	0.00107	0.00107	0.00108	0.00111	0.00112	0.00113	0.00113	0.00113	0.00114
organochlorine pesticides - endosulfan i	12	0	0.00117	0.00117	0.00118	0.00121	0.00123	0.00123	0.00123	0.00124	0.00125
organochlorine pesticides - endosulfan ii	12	0	0.00144	0.00144	0.00145	0.00149	0.00151	0.00152	0.00152	0.00153	0.00154
organochlorine pesticides - endosulfan sulfate	12	0	0.00124	0.00125	0.00126	0.00129	0.00131	0.00131	0.00132	0.00132	0.00133
organochlorine pesticides - endrin	12	0	0.00184	0.00185	0.00187	0.00191	0.00194	0.00195	0.00195	0.00196	0.00198
organochlorine pesticides - endrin aldehyde	12	0	0.00127	0.00128	0.00129	0.00132	0.00134	0.00134	0.00135	0.00135	0.00136
organochlorine pesticides - heptachlor	12	0	0.00153	0.00154	0.00155	0.00159	0.00162	0.00162	0.00162	0.00163	0.00164
organochlorine pesticides - heptachlor epoxide	12	0	0.00140	0.00140	0.00141	0.00145	0.00147	0.00148	0.00148	0.00149	0.00150
organochlorine pesticides - hexachlorocyclohexane, alpha-	12	0	0.000883	0.000888	0.000892	0.000914	0.000931	0.000933	0.000935	0.000940	0.000945
organochlorine pesticides - hexachlorocyclohexane, beta-	12	0	0.00168	0.00169	0.00170	0.00174	0.00177	0.00178	0.00178	0.00179	0.00180
organochlorine pesticides - hexachlorocyclohexane, delta-	12	0	0.00164	0.00165	0.00166	0.00170	0.00173	0.00174	0.00174	0.00175	0.00176
organochlorine pesticides - hexachlorocyclohexane, gamma-	12	0	0.00174	0.00174	0.00176	0.00180	0.00183	0.00184	0.00184	0.00185	0.00186
organochlorine pesticides - toxaphene	12	0	0.0243	0.0244	0.0246	0.0251	0.0256	0.0257	0.0257	0.0258	0.0260
pcbs - aroclor 1016	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1221	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1232	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1242	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1248	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1254	12	0	0.00498	0.00501	0.00503	0.00505	0.00515	0.00519	0.00530	0.00536	0.00541
pcbs - aroclor 1260	12	0	0.00976	0.00981	0.00985	0.00990	0.0101	0.0102	0.0104	0.0105	0.0106
perchlorate - perchlorate	12	0	0.0000802	0.0000821	0.0000822	0.000128	0.000167	0.000190	0.000217	0.000221	0.000223
pesticides - prometon	11	0	0.0118	0.0118	0.0118	0.0119	0.0119	0.0119	0.0120	0.0120	0.0120
radium-226 & other gamma emitters - combined radium 226/228	12	0	0.626	0.687	0.733	0.917	0.973	0.982	0.987	1.06	1.13
radium-226 & other gamma emitters - radium-226	12	0	0.303	0.358	0.364	0.700	0.823	0.837	0.890	0.983	1.07
radium-226 & other gamma emitters - radium-228	12	0	0.0628	0.0946	0.109	0.195	0.310	0.320	0.502	0.549	0.576
svocs - 1,2,4,5-tetrachlorobenzene	11	0	0.0448	0.0462	0.0465	0.0476	0.0488	0.0488	0.0490	0.049	0.0490
svocs - 1,2-diphenylhydrazine	11	0	0.0201	0.0208	0.0209	0.0214	0.0219	0.0219	0.0220	0.0220	0.0220

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

svocs - 1-methylnaphthalene	11	0	0.0102	0.0106	0.0107	0.0109	0.0112	0.0112	0.0112	0.0112	0.0112
svocs - 2,4,5-trichlorophenol	11	0	0.00915	0.00943	0.00948	0.00971	0.00997	0.00997	0.0100	0.0100	0.0100
svocs - 2,4,6-trichlorophenol	11	0	0.00915	0.00943	0.00948	0.00971	0.00997	0.00997	0.0100	0.0100	0.0100
svocs - 2,4-dichlorophenol	11	0	0.00915	0.00943	0.00948	0.00971	0.00997	0.00997	0.0100	0.0100	0.0100
svocs - 2,4-dinitro-o-cresol	11	0	0.302	0.311	0.313	0.320	0.329	0.329	0.330	0.330	0.330
svocs - 2,4-dinitrotoluene	11	0	0.0604	0.0623	0.0626	0.0641	0.0658	0.0658	0.0660	0.0660	0.0660
svocs - 2,6-dinitrotoluene	11	0	0.0256	0.0264	0.0266	0.0272	0.0279	0.0279	0.0280	0.0280	0.0280
svocs - 2-methylnaphthalene	11	0	0.0174	0.0179	0.0180	0.0184	0.0189	0.0189	0.0190	0.0190	0.0190
svocs - acenaphthene	11	0	0.00942	0.00972	0.00977	0.0100	0.0103	0.0103	0.0103	0.0103	0.0103
svocs - acenaphthylene	11	0	0.0751	0.0775	0.0779	0.0797	0.0818	0.0818	0.0821	0.0821	0.0821
svocs - anthracene	11	0	0.0155	0.0160	0.0161	0.0165	0.0169	0.0169	0.0170	0.0170	0.0170
svocs - atrazine	11	0	0.0338	0.0349	0.0351	0.0359	0.0369	0.0369	0.0370	0.0370	0.0370
svocs - benzidine	11	0	0.905	0.934	0.939	0.961	0.987	0.987	0.990	0.990	0.990
svocs - benzo(a)anthracene	11	0	0.0183	0.0189	0.0190	0.0194	0.0199	0.0199	0.0200	0.0200	0.0200
svocs - benzo(a)pyrene	11	0	0.0183	0.0189	0.0190	0.0194	0.0199	0.0199	0.0200	0.0200	0.0200
svocs - benzo(b)fluoranthene	11	0	0.0240	0.0247	0.0249	0.0254	0.0261	0.0261	0.0262	0.0262	0.0262
svocs - benzo(g,h,i)perylene	11	0	0.0146	0.0151	0.0152	0.0155	0.0159	0.0159	0.0160	0.0160	0.0160
svocs - benzo(k)fluoranthene	11	0	0.0366	0.0377	0.0379	0.0388	0.0399	0.0399	0.0400	0.0400	0.0400
svocs - bis(2-chloroethyl)ether	11	0	0.0152	0.0157	0.0158	0.0161	0.0165	0.0165	0.0166	0.0166	0.0166
svocs - bis(2-chloroisopropyl)ether	11	0	0.0210	0.0217	0.0218	0.0223	0.0229	0.0229	0.0230	0.0230	0.0230
svocs - bis(2-ethylhexyl)phthalate	9	0	0.0421	0.0437	0.0447	0.0458	0.046	0.046	0.0475	0.0506	0.053
svocs - chrysene	11	0	0.0247	0.0255	0.0256	0.0262	0.0269	0.0269	0.0270	0.0270	0.0270
svocs - dibenz(a,h)anthracene	11	0	0.0174	0.0179	0.0180	0.0184	0.0189	0.0189	0.0190	0.0190	0.0190
svocs - dibutylphthalate	11	0	0.0265	0.0274	0.0275	0.0282	0.0289	0.0289	0.0290	0.0290	0.0290
svocs - dichlorobenzidine, 3,3'-	11	0	0.0823	0.0849	0.0853	0.0874	0.0897	0.0897	0.0900	0.0900	0.0900
svocs - diethyl phthalate	11	0	0.0238	0.0245	0.0247	0.0252	0.0259	0.0259	0.0260	0.0260	0.0260
svocs - dimethyl phthalate	11	0	0.0210	0.0217	0.0218	0.0223	0.0229	0.0229	0.0230	0.0230	0.0230
svocs - dinitrophenols	11	0	0.305	0.314	0.316	0.323	0.332	0.332	0.333	0.333	0.333
svocs - fluoranthene	11	0	0.0329	0.0340	0.0342	0.0350	0.0359	0.0359	0.0360	0.0360	0.0360
svocs - fluorene	11	0	0.0165	0.0170	0.0171	0.0175	0.0179	0.0179	0.0180	0.0180	0.0180
svocs - hexachlorobenzene	11	0	0.0265	0.0274	0.0275	0.0282	0.0289	0.0289	0.0290	0.0290	0.0290
svocs - hexachlorobutadiene	11	0	0.00915	0.00943	0.00948	0.00971	0.00997	0.00997	0.0100	0.0100	0.0100
svocs - hexachlorocyclopentadiene	11	0	0.102	0.105	0.106	0.108	0.111	0.111	0.111	0.111	0.111
svocs - hexachloroethane	11	0	0.0195	0.0201	0.0202	0.0207	0.0212	0.0212	0.0213	0.0213	0.0213
svocs - indeno(1,2,3-cd)pyrene	11	0	0.0201	0.0208	0.0209	0.0214	0.0219	0.0219	0.0220	0.0220	0.0220
svocs - isophorone	11	0	0.0155	0.0160	0.0161	0.0165	0.0169	0.0169	0.0170	0.0170	0.0170
svocs - naphthalene	11	0	0.0284	0.0292	0.0294	0.0301	0.0309	0.0309	0.0310	0.0310	0.0310
svocs - nitrobenzene	11	0	0.0201	0.0208	0.0209	0.0214	0.0219	0.0219	0.0220	0.0220	0.0220
svocs - n-nitrosodibutylamine	11	0	0.0884	0.0912	0.0917	0.0939	0.0964	0.0964	0.0967	0.0967	0.0967
svocs - n-nitrosodiethylamine	11	0	0.0595	0.0613	0.0616	0.0631	0.0648	0.0648	0.0650	0.0650	0.0650
svocs - n-nitrosodimethylamine	11	0	0.0338	0.0349	0.0351	0.0359	0.0369	0.0369	0.0370	0.0370	0.0370
svocs - n-nitrosodiphenylamine	11	0	0.0192	0.0198	0.0199	0.0204	0.0209	0.0209	0.0210	0.0210	0.0210
svocs - n-nitrosopyrrolidine	11	0	0.0585	0.0604	0.0607	0.0621	0.0638	0.0638	0.0640	0.0640	0.0640
svocs - pentachlorobenzene	11	0	0.0595	0.0613	0.0616	0.0631	0.0648	0.0648	0.0650	0.0650	0.0650
svocs - pentachlorophenol	11	0	0.302	0.311	0.313	0.320	0.329	0.329	0.330	0.330	0.330
svocs - phenanthrene	11	0	0.0155	0.0160	0.0161	0.0165	0.0169	0.0169	0.0170	0.0170	0.0170
svocs - pyrene	11	0	0.0111	0.0114	0.0115	0.0117	0.0121	0.0121	0.0121	0.0121	0.0121
tph-dro & oro - dro (c10-c28)	10	0	33.5	33.82	33.9	34.6	35.08	35.2	35.5	35.8	36.1
tph-dro & oro - oro (c28-c36)	12	0	33.5	33.6	33.8	34.6	35.2	35.3	35.4	35.8	36.1
tph-gro - gro (c6-c10)	12	0	0.0632	0.0635	0.0636	0.0647	0.0649	0.0650	0.0652	0.0729	0.0803
vocs - 1,1,1-trichloroethane	11	0	0.000491	0.000491	0.000494	0.000499	0.000500	0.000500	0.000500	0.000501	0.000501
vocs - 1,1,2,2-tetrachloroethane	11	0	0.000373	0.000373	0.000376	0.000379	0.000380	0.000380	0.000380	0.000381	0.000381
vocs - 1,1,2-trichloroethane	11	0	0.000491	0.000491	0.000494	0.000499	0.000500	0.000500	0.000500	0.000501	0.000501
vocs - 1,1-dichloroethane	11	0	0.000580	0.000580	0.000583	0.000589	0.000590	0.000590	0.000590	0.000591	0.000591
vocs - 1,1-dichloroethylene	11	0	0.000491	0.000491	0.000494	0.000499	0.000500	0.000500	0.000500	0.000501	0.000501
vocs - 1,1-dichloropropene	11	0	0.000511	0.000511	0.000514	0.000519	0.000520	0.000520	0.000520	0.000521	0.000521
vocs - 1,2,4-trichlorobenzene	11	0	0.000953	0.000953	0.000959	0.000968	0.000969	0.000970	0.000970	0.000971	0.000972
vocs - 1,2-dibromoethane	11	0	0.000295	0.000295	0.000297	0.000299	0.000300	0.000300	0.000300	0.000301	0.000301
vocs - 1,2-dichlorobenzene	11	0	0.000246	0.000246	0.000248	0.000250	0.000250	0.000250	0.000250	0.000251	0.000251
vocs - 1,2-dichloroethane	11	0	0.000511	0.000511	0.000514	0.000519	0.000520	0.000520	0.000520	0.000521	0.000521
vocs - 1,2-dichloropropane	11	0	0.000491	0.000491	0.000494	0.000499	0.000500	0.000500	0.000500	0.000501	0.000501
vocs - 1,3-dichlorobenzene	11	0	0.000305	0.000305	0.000307	0.000309	0.000310	0.000310	0.000310	0.000311	0.000311
vocs - 1,3-dichloropropene, total	11	0	0.000511	0.000511	0.000514	0.000519	0.000520	0.000520	0.000520	0.000521	0.000521
vocs - 1,4-dichlorobenzene	11	0	0.000314	0.000314	0.000316	0.000319	0.000320	0.000320	0.000320	0.000321	0.000321
vocs - 1,4-dioxane	11	0	0.0187	0.0187	0.0188	0.0190	0.0190	0.0190	0.0190	0.0190	0.0190
vocs - acrolein	11	0	0.00845	0.00845	0.00850	0.00858	0.00859	0.00860	0.00860	0.00861	0.00862
vocs - acrylonitrile	11	0	0.00354	0.00354	0.00356	0.00359	0.00360	0.00360	0.00360	0.00361	0.00361
vocs - benzene	11	0	0.000619	0.000619	0.000623	0.000629	0.000630	0.000630	0.000630	0.000631	0.000631
vocs - bromodichloromethane	11	0	0.000196	0.000196	0.000198	0.000200	0.000200	0.000200	0.000200	0.000200	0.000200
vocs - bromomethane	11	0	0.00108	0.00108	0.00109	0.00110	0.00110	0.00110	0.00110	0.00110	0.00110
vocs - carbon tetrachloride	11	0	0.000501	0.000501	0.000504	0.000509	0.000510	0.000510	0.000510	0.000511	0.000511
vocs - chloroform	11	0	0.000855	0.000855	0.000860	0.000868	0.000869	0.000870	0.000870	0.000871	0.000872
vocs - chloromethane	11	0	0.00118	0.00118	0.00119	0.00120	0.00120	0.00120	0.00120	0.00120	0.00120
vocs - cis-1,2-dichloroethene	11	0	0.000560	0.000560	0.000564	0.000569	0.000570	0.000570	0.000570	0.000571	0.000571
vocs - cis-1,3-dichloropropene	11	0	0.000442	0.000442	0.000445	0.000449	0.000450	0.000450	0.000450	0.000451	0.000451
vocs - dichlorodifluoromethane	11	0	0.000717	0.000717	0.000722	0.000729	0.000730	0.000730	0.000730	0.000731	0.000731
vocs - ethylbenzene	11	0	0.000442	0.000442	0.000445	0.000449	0.000450	0.000450	0.000450	0.000451	0.000451

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Summary Statistics with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

vocs - methyl tert-butyl ether (mtbe)	11	0	0.000599	0.000599	0.000603	0.000609	0.000610	0.000610	0.000610	0.000611	0.000611
vocs - methylene chloride	11	0	0.00491	0.00491	0.00494	0.00499	0.00500	0.00500	0.00500	0.00501	0.00501
vocs - monochlorobenzene	11	0	0.000295	0.000295	0.000297	0.000299	0.000300	0.000300	0.000300	0.000301	0.000301
vocs - styrene	11	0	0.000295	0.000295	0.000297	0.000299	0.000300	0.000300	0.000300	0.000301	0.000301
vocs - tetrachloroethylene (pce)	11	0	0.000727	0.000727	0.000732	0.000739	0.000740	0.000740	0.000740	0.000741	0.000741
vocs - toluene	11	0	0.000884	0.000884	0.000890	0.000898	0.000899	0.000900	0.000900	0.000901	0.000902
vocs - trans-1,2-dichloroethene	11	0	0.000491	0.000491	0.000494	0.000499	0.000500	0.000500	0.000500	0.000501	0.000501
vocs - trans-1,3-dichloropropene	11	0	0.000511	0.000511	0.000514	0.000519	0.000520	0.000520	0.000520	0.000521	0.000521
vocs - tribromomethane	11	0	0.000501	0.000501	0.000504	0.000509	0.000510	0.000510	0.000510	0.000511	0.000511
vocs - trichloroethylene (tce)	11	0	0.000275	0.000275	0.000277	0.000279	0.000280	0.000280	0.000280	0.000281	0.000281
vocs - trichlorofluoromethane	11	0	0.000491	0.000491	0.000494	0.000499	0.000500	0.000500	0.000500	0.000501	0.000501
vocs - vinyl chloride	11	0	0.000589	0.000589	0.000593	0.000599	0.000600	0.000600	0.000600	0.000601	0.000601
vocs - xylenes, total	11	0	0.000491	0.000491	0.000494	0.000499	0.000500	0.000500	0.000500	0.000501	0.000501

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Background Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation	ProUCL 5.17/26/2021 7:49:18 AM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
Different or Future K Observations	1
Number of Bootstrap Operations	2000

Result (general chemistry - 7 day leach - total dissolved solids)

General Statistics

Total Number of Observations	12	Number of Distinct Observations	12
Minimum	112	First Quartile	155.3
Second Largest	370	Median	169.5
Maximum	524	Third Quartile	202.5
Mean	214.1	SD	119.8
Coefficient of Variation	0.56	Skewness	1.977
Mean of logged Data	5.261	SD of logged Data	0.445

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test

Shapiro Wilk Test Statistic	0.73	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.362	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.243	Data Not Normal at 5% Significance Level	

Data Not Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	541.9	90% Percentile (z)	367.6
95% UPL (t)	438.1	95% Percentile (z)	411.2
95% USL	487.9	99% Percentile (z)	492.8

Gamma GOF Test

A-D Test Statistic	1.062	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.732	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.337	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.246	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	4.911	k star (bias corrected MLE)	3.739
Theta hat (MLE)	43.6	Theta star (bias corrected MLE)	57.26
nu hat (MLE)	117.9	nu star (bias corrected)	89.73
MLE Mean (bias corrected)	214.1	MLE Sd (bias corrected)	110.7

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	437.8	90% Percentile	362.5
95% Hawkins Wixley (HW) Approx. Gamma UPL	438.6	95% Percentile	422.6
95% WH Approx. Gamma UTL with 95% Coverage	594.2	99% Percentile	551.2
95% HW Approx. Gamma UTL with 95% Coverage	605.5		
95% WH USL	508.9	95% HW USL	513.6

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.856	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.311	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.243	Data Not Lognormal at 5% Significance Level	

Data Not Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage	651.5	90% Percentile (z)	340.9
95% UPL (t)	442.9	95% Percentile (z)	400.8
95% USL	533	99% Percentile (z)	542.9

Nonparametric Distribution Free Background Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	12	95% UTL with 95% Coverage	524
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	524	95% BCA Bootstrap UTL with 95% Coverage	524
95% UPL	524	90% Percentile	360
90% Chebyshev UPL	588.2	95% Percentile	439.3
95% Chebyshev UPL	757.7	99% Percentile	507.1
95% USL	524		

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Result (general chemistry - ph)

General Statistics

Total Number of Observations	12	Number of Distinct Observations	6
Minimum	7.7	First Quartile	8.075
Second Largest	8.3	Median	8.2
Maximum	8.4	Third Quartile	8.3
Mean	8.15	SD	0.188
Coefficient of Variation	0.0231	Skewness	-1.177
Mean of logged Data	2.098	SD of logged Data	0.0234

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test

Shapiro Wilk Test Statistic	0.906	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.188	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	8.665	90% Percentile (z)	8.391
95% UPL (t)	8.502	95% Percentile (z)	8.46
95% USL	8.58	99% Percentile (z)	8.588

Gamma GOF Test

A-D Test Statistic	0.476	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.731	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.194	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.245	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	2012	k star (bias corrected MLE)	1509
Theta hat (MLE)	0.00405	Theta star (bias corrected MLE)	0.0054
nu hat (MLE)	48280	nu star (bias corrected)	36211
MLE Mean (bias corrected)	8.15	MLE Sd (bias corrected)	0.21

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	8.509	90% Percentile	8.42
95% Hawkins Wixley (HW) Approx. Gamma UPL	8.509	95% Percentile	8.498
95% WH Approx. Gamma UTL with 95% Coverage	8.679	99% Percentile	8.646
95% HW Approx. Gamma UTL with 95% Coverage	8.681		
95% WH USL	8.59	95% HW USL	8.591

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.899	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.191	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage	8.686	90% Percentile (z)	8.396
95% UPL (t)	8.512	95% Percentile (z)	8.467
95% USL	8.595	99% Percentile (z)	8.603

Nonparametric Distribution Free Background Statistics

Data appear Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	12	95% UTL with 95% Coverage	8.4
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	8.4	95% BCA Bootstrap UTL with 95% Coverage	8.4
95% UPL	8.4	90% Percentile	8.3
90% Chebyshev UPL	8.738	95% Percentile	8.345
95% Chebyshev UPL	9.004	99% Percentile	8.389
95% USL	8.4		

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (general chemistry - phenols, total)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	9		
Number of Detects	6	Number of Non-Detects	6
Number of Distinct Detects	6	Number of Distinct Non-Detects	3
Minimum Detect	0.358	Minimum Non-Detect	0.334
Maximum Detect	5.59	Maximum Non-Detect	0.338
Variance Detected	4.145	Percent Non-Detects	50%
Mean Detected	1.898	SD Detected	2.036
Mean of Detected Logged Data	0.102	SD of Detected Logged Data	1.171

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.803	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.265	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	1.116	KM SD	1.529
95% UTL95% Coverage	5.299	95% KM UPL (t)	3.974
90% KM Percentile (z)	3.075	95% KM Percentile (z)	3.631
99% KM Percentile (z)	4.673	95% KM USL	4.61

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	1.033	SD	1.643
95% UTL95% Coverage	5.528	95% UPL (t)	4.104
90% Percentile (z)	3.139	95% Percentile (z)	3.735
99% Percentile (z)	4.855	95% USL	4.787

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.54	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.714	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.311	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.34	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.065	k star (bias corrected MLE)	0.644
Theta hat (MLE)	1.782	Theta star (bias corrected MLE)	2.948
nu hat (MLE)	12.78	nu star (bias corrected)	7.723
MLE Mean (bias corrected)	1.898		
MLE Sd (bias corrected)	2.365	95% Percentile of Chisquare (2kstar)	4.516

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.954
Maximum	5.59	Median	0.184
SD	1.69	CV	1.772
k hat (MLE)	0.311	k star (bias corrected MLE)	0.289
Theta hat (MLE)	3.066	Theta star (bias corrected MLE)	3.302
nu hat (MLE)	7.465	nu star (bias corrected)	6.932
MLE Mean (bias corrected)	0.954	MLE Sd (bias corrected)	1.775
95% Percentile of Chisquare (2kstar)	2.675	90% Percentile	2.825
95% Percentile	4.416	99% Percentile	8.57

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	10.11	13.22	95% Approx. Gamma UPL	4.792	5.357
95% Gamma USL	7.015	8.476			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	1.116	SD (KM)	1.529
Variance (KM)	2.338	SE of Mean (KM)	0.484
k hat (KM)	0.532	k star (KM)	0.455
nu hat (KM)	12.78	nu star (KM)	10.92
theta hat (KM)	2.096	theta star (KM)	2.453
80% gamma percentile (KM)	1.823	90% gamma percentile (KM)	3.077
95% gamma percentile (KM)	4.432	99% gamma percentile (KM)	7.796

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	6.347	6.683	95% Approx. Gamma UPL	3.721	3.705
95% KM Gamma Percentile	3.186	3.132	95% Gamma USL	4.865	4.97

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.845	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.291	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.972	Mean in Log Scale	-1.6
SD in Original Scale	1.679	SD in Log Scale	2.021
95% UTL95% Coverage	50.83	95% BCA UTL95% Coverage	5.59
95% Bootstrap (%) UTL95% Coverage	5.59	95% UPL (t)	8.819
90% Percentile (z)	2.69	95% Percentile (z)	5.604
99% Percentile (z)	22.21	95% USL	20.43

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-0.497	95% KM UTL (Lognormal)95% Coverage	8.527
KM SD of Logged Data	0.965	95% KM UPL (Lognormal)	3.694
95% KM Percentile Lognormal (z)	2.975	95% KM USL (Lognormal)	5.518

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	1.033	Mean in Log Scale	-0.839
SD in Original Scale	1.643	SD in Log Scale	1.262
95% UTL95% Coverage	13.63	95% UPL (t)	4.567
90% Percentile (z)	2.176	95% Percentile (z)	3.441
99% Percentile (z)	8.13	95% USL	7.716

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	5.59
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	5.59
95% USL	5.59	95% KM Chebyshev UPL	8.053

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (general chemistry - soluble - chloride)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	12		
Number of Detects	11	Number of Non-Detects	1
Number of Distinct Detects	11	Number of Distinct Non-Detects	1
Minimum Detect	5.94	Minimum Non-Detect	4.82
Maximum Detect	39.8	Maximum Non-Detect	4.82
Variance Detected	126.5	Percent Non-Detects	8.333%
Mean Detected	15.31	SD Detected	11.25
Mean of Detected Logged Data	2.517	SD of Detected Logged Data	0.66

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.799	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.85	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.326	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.251	Data Not Normal at 5% Significance Level	

Data Not Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	14.44	KM SD	10.67
95% UTL95% Coverage	43.63	95% KM UPL (t)	34.38
90% KM Percentile (z)	28.11	95% KM Percentile (z)	31.99
99% KM Percentile (z)	39.26	95% KM USL	38.82

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	14.24	SD	11.35
95% UTL95% Coverage	45.3	95% UPL (t)	35.46
90% Percentile (z)	28.79	95% Percentile (z)	32.91
99% Percentile (z)	40.65	95% USL	40.18

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.668	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.736	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.265	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.258	Data Not Gamma Distributed at 5% Significance Level	

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.513	k star (bias corrected MLE)	1.888
Theta hat (MLE)	6.093	Theta star (bias corrected MLE)	8.109
nu hat (MLE)	55.28	nu star (bias corrected)	41.54
MLE Mean (bias corrected)	15.31		
MLE Sd (bias corrected)	11.14	95% Percentile of Chisquare (2kstar)	9.123

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	14.04
Maximum	39.8	Median	11.3
SD	11.6	CV	0.826
k hat (MLE)	0.823	k star (bias corrected MLE)	0.673
Theta hat (MLE)	17.06	Theta star (bias corrected MLE)	20.86
nu hat (MLE)	19.75	nu star (bias corrected)	16.15
MLE Mean (bias corrected)	14.04	MLE Sd (bias corrected)	17.11
95% Percentile of Chisquare (2kstar)	4.646	90% Percentile	35.56
95% Percentile	48.46	99% Percentile	79.36

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	85.7	115.9	95% Approx. Gamma UPL	50.87	61.61
95% Gamma USL	66.07	84.47			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	14.44	SD (KM)	10.67
Variance (KM)	113.9	SE of Mean (KM)	3.231
k hat (KM)	1.831	k star (KM)	1.428
nu hat (KM)	43.93	nu star (KM)	34.28
theta hat (KM)	7.886	theta star (KM)	10.11
80% gamma percentile (KM)	22.46	90% gamma percentile (KM)	30.44
95% gamma percentile (KM)	38.23	99% gamma percentile (KM)	55.86

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	53.7	56.31	95% Approx. Gamma UPL	36.25	36.76
95% KM Gamma Percentile	32.45	32.66	95% Gamma USL	44.05	45.36

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.894	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.85	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.222	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.251	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	14.24	Mean in Log Scale	2.384
SD in Original Scale	11.34	SD in Log Scale	0.78
95% UTL95% Coverage	91.59	95% BCA UTL95% Coverage	39.8
95% Bootstrap (%) UTL95% Coverage	39.8	95% UPL (t)	46.59
90% Percentile (z)	29.46	95% Percentile (z)	39.11
99% Percentile (z)	66.54	95% USL	64.43

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	2.438	95% KM UTL (Lognormal)95% Coverage	69.04
KM SD of Logged Data	0.657	95% KM UPL (Lognormal)	39.08
95% KM Percentile Lognormal (z)	33.72	95% KM USL (Lognormal)	51.34

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	14.24	Mean in Log Scale	2.38
SD in Original Scale	11.35	SD in Log Scale	0.787
95% UTL95% Coverage	93.11	95% UPL (t)	47.06
90% Percentile (z)	29.63	95% Percentile (z)	39.44
99% Percentile (z)	67.44	95% USL	65.28

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	39.8
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	39.8
95% USL	39.8	95% KM Chebyshev UPL	62.85

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (general chemistry - soluble - fluoride)

General Statistics

Total Number of Observations	12	Number of Distinct Observations	12
Minimum	2.98	First Quartile	4.073
Second Largest	7.52	Median	5.45
Maximum	8.3	Third Quartile	5.723
Mean	5.173	SD	1.629
Coefficient of Variation	0.315	Skewness	0.512
Mean of logged Data	1.598	SD of logged Data	0.319

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test

Shapiro Wilk Test Statistic	0.936	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.859	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.186	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.243	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	9.629	90% Percentile (z)	7.26
95% UPL (t)	8.218	95% Percentile (z)	7.852
95% USL	8.895	99% Percentile (z)	8.962

Gamma GOF Test

A-D Test Statistic	0.33	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.73	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.163	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.245	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	11.07	k star (bias corrected MLE)	8.357
Theta hat (MLE)	0.467	Theta star (bias corrected MLE)	0.619
nu hat (MLE)	265.6	nu star (bias corrected)	200.6
MLE Mean (bias corrected)	5.173	MLE Sd (bias corrected)	1.79

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	8.622	90% Percentile	7.558
95% Hawkins Wixley (HW) Approx. Gamma UPL	8.696	95% Percentile	8.425
95% WH Approx. Gamma UTL with 95% Coverage	10.76	99% Percentile	10.22
95% HW Approx. Gamma UTL with 95% Coverage	10.98		
95% WH USL	9.607	95% HW USL	9.74

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.95	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.177	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage	11.81	90% Percentile (z)	7.433
95% UPL (t)	8.964	95% Percentile (z)	8.345
95% USL	10.23	99% Percentile (z)	10.37

Nonparametric Distribution Free Background Statistics
Data appear Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	12	95% UTL with 95% Coverage	8.3
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	8.3	95% BCA Bootstrap UTL with 95% Coverage	8.3
95% UPL	8.3	90% Percentile	7.347
90% Chebyshev UPL	10.26	95% Percentile	7.871
95% Chebyshev UPL	12.56	99% Percentile	8.214
95% USL	8.3		

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (general chemistry - soluble - nitrate as n)

General Statistics

Total Number of Observations	10	Number of Distinct Observations	10
Minimum	1.52	First Quartile	1.803
Second Largest	2.83	Median	2.105
Maximum	4.26	Third Quartile	2.643
Mean	2.324	SD	0.816
Coefficient of Variation	0.351	Skewness	1.588
Mean of logged Data	0.796	SD of logged Data	0.314

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.911	d2max (for USL)	2.176

Normal GOF Test

Shapiro Wilk Test Statistic	0.857	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.842	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.18	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.262	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	4.698	90% Percentile (z)	3.369
95% UPL (t)	3.892	95% Percentile (z)	3.666
95% USL	4.099	99% Percentile (z)	4.222

Gamma GOF Test

A-D Test Statistic	0.326	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.725	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.153	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.267	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	10.73	k star (bias corrected MLE)	7.576
Theta hat (MLE)	0.217	Theta star (bias corrected MLE)	0.307
nu hat (MLE)	214.5	nu star (bias corrected)	151.5
MLE Mean (bias corrected)	2.324	MLE Sd (bias corrected)	0.844

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	3.971	90% Percentile	3.45
95% Hawkins Wixley (HW) Approx. Gamma UPL	3.988	95% Percentile	3.864
95% WH Approx. Gamma UTL with 95% Coverage	5.125	99% Percentile	4.723
95% HW Approx. Gamma UTL with 95% Coverage	5.207		
95% WH USL	4.249	95% HW USL	4.278

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.941	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.842	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.133	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.262	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage	5.523	90% Percentile (z)	3.313
95% UPL (t)	4.051	95% Percentile (z)	3.713
95% USL	4.386	99% Percentile (z)	4.598

Nonparametric Distribution Free Background Statistics
Data appear Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	10	95% UTL with 95% Coverage	4.26
Approx, f used to compute achieved CC	0.526	Approximate Actual Confidence Coefficient achieved by UTL	0.401
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	4.26	95% BCA Bootstrap UTL with 95% Coverage	4.26

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

95% UPL	4.26	90% Percentile	2.973
90% Chebyshev UPL	4.89	95% Percentile	3.617
95% Chebyshev UPL	6.053	99% Percentile	4.131
95% USL	4.26		

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (general chemistry - soluble - nitrate nitrite as n)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	11		
Number of Detects	4	Number of Non-Detects	8
Number of Distinct Detects	4	Number of Distinct Non-Detects	7
Minimum Detect	1.56	Minimum Non-Detect	0.277
Maximum Detect	4.39	Maximum Non-Detect	5.13
Variance Detected	1.76	Percent Non-Detects	66.67%
Mean Detected	3.283	SD Detected	1.327
Mean of Detected Logged Data	1.111	SD of Detected Logged Data	0.482

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.891	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.269	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.375	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	2.681	KM SD	1.582
95% UTL95% Coverage	7.009	95% KM UPL (t)	5.638
90% KM Percentile (z)	4.708	95% KM Percentile (z)	5.283
99% KM Percentile (z)	6.361	95% KM USL	6.295

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	2.564	SD	1.098
95% UTL95% Coverage	5.568	95% UPL (t)	4.616
90% Percentile (z)	3.971	95% Percentile (z)	4.37
99% Percentile (z)	5.119	95% USL	5.073

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.407	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.658	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.296	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.396	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	6.623	k star (bias corrected MLE)	1.822
Theta hat (MLE)	0.496	Theta star (bias corrected MLE)	1.801
nu hat (MLE)	52.99	nu star (bias corrected)	14.58
MLE Mean (bias corrected)	3.283		
MLE Sd (bias corrected)	2.432	95% Percentile of Chisquare (2kstar)	8.906

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.57	Mean	2.689
Maximum	4.39	Median	2.639
SD	1.069	CV	0.398
k hat (MLE)	4.923	k star (bias corrected MLE)	3.748
Theta hat (MLE)	0.546	Theta star (bias corrected MLE)	0.717
nu hat (MLE)	118.1	nu star (bias corrected)	89.94
MLE Mean (bias corrected)	2.689	MLE Sd (bias corrected)	1.389
95% Percentile of Chisquare (2kstar)	14.78	90% Percentile	4.551
95% Percentile	5.304	99% Percentile	6.916

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	7.468	7.979	95% Approx. Gamma UPL	5.514	5.721
95% Gamma USL	6.402	6.734			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	2.681	SD (KM)	1.582
Variance (KM)	2.501	SE of Mean (KM)	0.817
k hat (KM)	2.874	k star (KM)	2.211
nu hat (KM)	68.99	nu star (KM)	53.07
theta hat (KM)	0.933	theta star (KM)	1.213
80% gamma percentile (KM)	3.967	90% gamma percentile (KM)	5.094
95% gamma percentile (KM)	6.163	99% gamma percentile (KM)	8.521

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	12.23	14.21	95% Approx. Gamma UPL	7.832	8.526
95% KM Gamma Percentile	6.897	7.386	95% Gamma USL	9.779	10.98

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.862	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.748	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.259	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.375	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	2.618	Mean in Log Scale	0.885
SD in Original Scale	1.017	SD in Log Scale	0.43
95% UTL95% Coverage	7.867	95% BCA UTL95% Coverage	4.39
95% Bootstrap (%) UTL95% Coverage	4.39	95% UPL (t)	5.417
90% Percentile (z)	4.206	95% Percentile (z)	4.918
99% Percentile (z)	6.595	95% USL	6.478

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	0.632	95% KM UTL (Lognormal)95% Coverage	31.34
KM SD of Logged Data	1.028	95% KM UPL (Lognormal)	12.86
95% KM Percentile Lognormal (z)	10.21	95% KM USL (Lognormal)	19.71

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	2.564	Mean in Log Scale	0.74
SD in Original Scale	1.098	SD in Log Scale	0.897
95% UTL95% Coverage	24.37	95% UPL (t)	11.2
90% Percentile (z)	6.614	95% Percentile (z)	9.162
99% Percentile (z)	16.88	95% USL	16.27

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	5.13
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	5.13
95% USL	5.13	95% KM Chebyshev UPL	9.857

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (general chemistry - soluble - sulfate)

General Statistics

Total Number of Observations	12	Number of Distinct Observations	12
Minimum	18	First Quartile	40.85
Second Largest	158	Median	51.75
Maximum	935	Third Quartile	95.23
Mean	136.4	SD	254.9
Coefficient of Variation	1.869	Skewness	3.306
Mean of logged Data	4.196	SD of logged Data	1.048

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test

Shapiro Wilk Test Statistic	0.466	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.859	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.383	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.243	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	833.8	90% Percentile (z)	463
95% UPL (t)	612.8	95% Percentile (z)	555.6
95% USL	718.8	99% Percentile (z)	729.4

Gamma GOF Test

A-D Test Statistic	1.298	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.763	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.255	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.254	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.822	k star (bias corrected MLE)	0.672
Theta hat (MLE)	166	Theta star (bias corrected MLE)	203
nu hat (MLE)	19.72	nu star (bias corrected)	16.12
MLE Mean (bias corrected)	136.4	MLE Sd (bias corrected)	166.4

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	488.8	90% Percentile	345.6
95% Hawkins Wixley (HW) Approx. Gamma UPL	478.1	95% Percentile	471.1
95% WH Approx. Gamma UTL with 95% Coverage	864.8	99% Percentile	771.6
95% HW Approx. Gamma UTL with 95% Coverage	897.6		
95% WH USL	651.4	95% HW USL	654.8

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.886	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.173	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage	1168	90% Percentile (z)	254.4
95% UPL (t)	471	95% Percentile (z)	372.3
95% USL	728.2	99% Percentile (z)	760.4

Nonparametric Distribution Free Background Statistics
Data appear Lognormal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	12	95% UTL with 95% Coverage	935
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	935	95% BCA Bootstrap UTL with 95% Coverage	935
95% UPL	935	90% Percentile	154.7
90% Chebyshev UPL	932.3	95% Percentile	507.6
95% Chebyshev UPL	1293	99% Percentile	849.5
95% USL	935		

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (metals - arsenic)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	12		
Number of Detects	7	Number of Non-Detects	5
Number of Distinct Detects	7	Number of Distinct Non-Detects	5
Minimum Detect	1.98	Minimum Non-Detect	3.55
Maximum Detect	3.95	Maximum Non-Detect	3.86
Variance Detected	0.488	Percent Non-Detects	41.67%
Mean Detected	2.759	SD Detected	0.699
Mean of Detected Logged Data	0.988	SD of Detected Logged Data	0.246

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.928	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.202	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	2.676	KM SD	0.585
95% UTL95% Coverage	4.276	95% KM UPL (t)	3.769
90% KM Percentile (z)	3.425	95% KM Percentile (z)	3.638
99% KM Percentile (z)	4.036	95% KM USL	4.012

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	2.383	SD	0.695
95% UTL95% Coverage	4.285	95% UPL (t)	3.682
90% Percentile (z)	3.273	95% Percentile (z)	3.526
99% Percentile (z)	4	95% USL	3.971

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.274	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.707	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.17	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.312	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	19.11	k star (bias corrected MLE)	11.01
Theta hat (MLE)	0.144	Theta star (bias corrected MLE)	0.25
nu hat (MLE)	267.5	nu star (bias corrected)	154.2
MLE Mean (bias corrected)	2.759		
MLE Sd (bias corrected)	0.831	95% Percentile of Chisquare (2kstar)	33.96

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	1.98	Mean	2.672
Maximum	3.95	Median	2.551
SD	0.527	CV	0.197
k hat (MLE)	31.15	k star (bias corrected MLE)	23.42
Theta hat (MLE)	0.0858	Theta star (bias corrected MLE)	0.114
nu hat (MLE)	747.7	nu star (bias corrected)	562.1
MLE Mean (bias corrected)	2.672	MLE Sd (bias corrected)	0.552
95% Percentile of Chisquare (2kstar)	63.82	90% Percentile	3.4
95% Percentile	3.64	99% Percentile	4.121

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	4.247	4.269	95% Approx. Gamma UPL	3.684	3.689
95% Gamma USL	3.947	3.959			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	2.676	SD (KM)	0.585
Variance (KM)	0.342	SE of Mean (KM)	0.221
k hat (KM)	20.94	k star (KM)	15.76
nu hat (KM)	502.6	nu star (KM)	378.3
theta hat (KM)	0.128	theta star (KM)	0.17
80% gamma percentile (KM)	3.22	90% gamma percentile (KM)	3.568
95% gamma percentile (KM)	3.872	99% gamma percentile (KM)	4.488

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	4.493	4.53	95% Approx. Gamma UPL	3.833	3.843
95% KM Gamma Percentile	3.673	3.679	95% Gamma USL	4.141	4.162

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.951	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.159	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.304	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	2.662	Mean in Log Scale	0.963
SD in Original Scale	0.53	SD in Log Scale	0.184
95% UTL95% Coverage	4.338	95% BCA UTL95% Coverage	3.95
95% Bootstrap (%) UTL95% Coverage	3.95	95% UPL (t)	3.697
90% Percentile (z)	3.317	95% Percentile (z)	3.547
99% Percentile (z)	4.023	95% USL	3.992

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	0.962	95% KM UTL (Lognormal)95% Coverage	4.658
KM SD of Logged Data	0.211	95% KM UPL (Lognormal)	3.88
95% KM Percentile Lognormal (z)	3.7	95% KM USL (Lognormal)	4.235

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	2.383	Mean in Log Scale	0.834
SD in Original Scale	0.695	SD in Log Scale	0.264
95% UTL95% Coverage	4.742	95% UPL (t)	3.772
90% Percentile (z)	3.23	95% Percentile (z)	3.555
99% Percentile (z)	4.256	95% USL	4.21

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	3.95
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	3.95
95% USL	3.95	95% KM Chebyshev UPL	5.329

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Result (metals - barium)

General Statistics

Total Number of Observations	12	Number of Distinct Observations	12
Minimum	37.4	First Quartile	225
Second Largest	368	Median	285.5
Maximum	501	Third Quartile	337.3
Mean	261.6	SD	136.8
Coefficient of Variation	0.523	Skewness	-0.398
Mean of logged Data	5.337	SD of logged Data	0.84

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test

Shapiro Wilk Test Statistic	0.907	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.859	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.263	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.243	Data Not Normal at 5% Significance Level

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	636	90% Percentile (z)	437
	95% UPL (t)	517.4	95% Percentile (z)	486.7
	95% USL	574.3	99% Percentile (z)	580

Gamma GOF Test

A-D Test Statistic	1.125	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.741	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.347	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.248	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	2.331	k star (bias corrected MLE)	1.803
Theta hat (MLE)	112.3	Theta star (bias corrected MLE)	145.1
nu hat (MLE)	55.93	nu star (bias corrected)	43.28
MLE Mean (bias corrected)	261.6	MLE Sd (bias corrected)	194.8

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	687.3	90% Percentile	521.5
95% Hawkins Wixley (HW) Approx. Gamma UPL	735.7	95% Percentile	641.5
95% WH Approx. Gamma UTL with 95% Coverage	1024	99% Percentile	909.2
95% HW Approx. Gamma UTL with 95% Coverage	1155		
95% WH USL	837.9	95% HW USL	919.1

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.771	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.859	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.365	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.243	Data Not Lognormal at 5% Significance Level

Data Not Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage	2069	90% Percentile (z)	610.1
95% UPL (t)	999.3	95% Percentile (z)	827.7
95% USL	1417	99% Percentile (z)	1467

Nonparametric Distribution Free Background Statistics

Data appear Approximate Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	12	95% UTL with 95% Coverage	501
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	501	95% BCA Bootstrap UTL with 95% Coverage	501
95% UPL	501	90% Percentile	365.9
90% Chebyshev UPL	688.9	95% Percentile	427.9
95% Chebyshev UPL	882.4	99% Percentile	486.4
95% USL	501		

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Result (metals - beryllium)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	12		
Number of Detects	6	Number of Non-Detects	6
Number of Distinct Detects	6	Number of Distinct Non-Detects	6
Minimum Detect	0.116	Minimum Non-Detect	0.355
Maximum Detect	0.319	Maximum Non-Detect	0.386
Variance Detected	0.0073	Percent Non-Detects	50%
Mean Detected	0.239	SD Detected	0.0854
Mean of Detected Logged Data	-1.493	SD of Detected Logged Data	0.409

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.879	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.254	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.239	KM SD	0.078
95% UTL95% Coverage	0.453	95% KM UPL (t)	0.385
90% KM Percentile (z)	0.339	95% KM Percentile (z)	0.368
99% KM Percentile (z)	0.421	95% KM USL	0.418

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.213	SD	0.0641
95% UTL95% Coverage	0.388	95% UPL (t)	0.332
90% Percentile (z)	0.295	95% Percentile (z)	0.318
99% Percentile (z)	0.362	95% USL	0.359

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.436	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.698	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.276	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.333	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	8.025	k star (bias corrected MLE)	4.124
Theta hat (MLE)	0.0298	Theta star (bias corrected MLE)	0.058
nu hat (MLE)	96.3	nu star (bias corrected)	49.48
MLE Mean (bias corrected)	0.239		
MLE Sd (bias corrected)	0.118	95% Percentile of Chisquare (2kstar)	15.86

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.116	Mean	0.236
Maximum	0.319	Median	0.233
SD	0.0577	CV	0.244
k hat (MLE)	15.85	k star (bias corrected MLE)	11.94
Theta hat (MLE)	0.0149	Theta star (bias corrected MLE)	0.0198
nu hat (MLE)	380.3	nu star (bias corrected)	286.6
MLE Mean (bias corrected)	0.236	MLE Sd (bias corrected)	0.0684
95% Percentile of Chisquare (2kstar)	36.27	90% Percentile	0.327
95% Percentile	0.359	99% Percentile	0.424

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.442	0.451	95% Approx. Gamma UPL	0.365	0.369
95% Gamma USL	0.401	0.407			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.239	SD (KM)	0.078
Variance (KM)	0.00608	SE of Mean (KM)	0.0349
k hat (KM)	9.416	k star (KM)	7.118
nu hat (KM)	226	nu star (KM)	170.8
theta hat (KM)	0.0254	theta star (KM)	0.0336
80% gamma percentile (KM)	0.31	90% gamma percentile (KM)	0.359
95% gamma percentile (KM)	0.403	99% gamma percentile (KM)	0.496

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

The following statistics are computed using gamma distribution and KM estimates

Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.536	0.554	95% Approx. Gamma UPL	0.42	0.427
95% KM Gamma Percentile	0.393	0.398	95% Gamma USL	0.474	0.485

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.87	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.255	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.325	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.232	Mean in Log Scale	-1.493
SD in Original Scale	0.0581	SD in Log Scale	0.276
95% UTL95% Coverage	0.478	95% BCA UTL95% Coverage	0.319
95% Bootstrap (%) UTL95% Coverage	0.319	95% UPL (t)	0.376
90% Percentile (z)	0.32	95% Percentile (z)	0.354
99% Percentile (z)	0.427	95% USL	0.422

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-1.493	95% KM UTL (Lognormal)95% Coverage	0.624
KM SD of Logged Data	0.374	95% KM UPL (Lognormal)	0.451
95% KM Percentile Lognormal (z)	0.415	95% KM USL (Lognormal)	0.527

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.213	Mean in Log Scale	-1.588
SD in Original Scale	0.0641	SD in Log Scale	0.294
95% UTL95% Coverage	0.456	95% UPL (t)	0.354
90% Percentile (z)	0.298	95% Percentile (z)	0.331
99% Percentile (z)	0.405	95% USL	0.4

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	0.386
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.386
95% USL	0.386	95% KM Chebyshev UPL	0.593

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result (metals - cadmium)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	11		
Number of Detects	5	Number of Non-Detects	7
Number of Distinct Detects	5	Number of Distinct Non-Detects	6
Minimum Detect	0.0289	Minimum Non-Detect	0.0531
Maximum Detect	0.0709	Maximum Non-Detect	0.231
Variance Detected	3.2640E-4	Percent Non-Detects	58.33%
Mean Detected	0.0527	SD Detected	0.0181
Mean of Detected Logged Data	-2.998	SD of Detected Logged Data	0.383

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.917	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.762	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.207	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.343	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.0496	KM SD	0.0164
95% UTL95% Coverage	0.0946	95% KM UPL (t)	0.0803
90% KM Percentile (z)	0.0707	95% KM Percentile (z)	0.0766
99% KM Percentile (z)	0.0878	95% KM USL	0.0872

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.0799	SD	0.0355
95% UTL95% Coverage	0.177	95% UPL (t)	0.146
90% Percentile (z)	0.125	95% Percentile (z)	0.138
99% Percentile (z)	0.163	95% USL	0.161

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.359	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.679	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.25	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.358	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	9.336	k star (bias corrected MLE)	3.868
Theta hat (MLE)	0.00565	Theta star (bias corrected MLE)	0.0136
nu hat (MLE)	93.36	nu star (bias corrected)	38.68
MLE Mean (bias corrected)	0.0527		
MLE Sd (bias corrected)	0.0268	95% Percentile of Chisquare (2kstar)	15.13

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0289	Mean	0.0491
Maximum	0.0709	Median	0.0483
SD	0.0125	CV	0.254
k hat (MLE)	16.51	k star (bias corrected MLE)	12.44
Theta hat (MLE)	0.00297	Theta star (bias corrected MLE)	0.00395
nu hat (MLE)	396.3	nu star (bias corrected)	298.6
MLE Mean (bias corrected)	0.0491	MLE Sd (bias corrected)	0.0139
95% Percentile of Chisquare (2kstar)	37.5	90% Percentile	0.0676
95% Percentile	0.074	99% Percentile	0.0872

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.0909	0.0923	95% Approx. Gamma UPL	0.0754	0.0759
95% Gamma USL	0.0826	0.0835			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.0496	SD (KM)	0.0164
Variance (KM)	2.7033E-4	SE of Mean (KM)	0.0076
k hat (KM)	9.098	k star (KM)	6.879
nu hat (KM)	218.3	nu star (KM)	165.1
theta hat (KM)	0.00545	theta star (KM)	0.00721
80% gamma percentile (KM)	0.0644	90% gamma percentile (KM)	0.0748
95% gamma percentile (KM)	0.0842	99% gamma percentile (KM)	0.104

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.109	0.111	95% Approx. Gamma UPL	0.0857	0.0866
95% KM Gamma Percentile	0.0803	0.081	95% Gamma USL	0.0963	0.0979

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.897	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.762	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.246	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.343	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.0483	Mean in Log Scale	-3.061
SD in Original Scale	0.0127	SD in Log Scale	0.265
95% UTL95% Coverage	0.0966	95% BCA UTL95% Coverage	0.0709
95% Bootstrap (%) UTL95% Coverage	0.0709	95% UPL (t)	0.0768
90% Percentile (z)	0.0657	95% Percentile (z)	0.0724
99% Percentile (z)	0.0867	95% USL	0.0857

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-3.063	95% KM UTL (Lognormal)95% Coverage	0.122
KM SD of Logged Data	0.351	95% KM UPL (Lognormal)	0.0901
95% KM Percentile Lognormal (z)	0.0832	95% KM USL (Lognormal)	0.104

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.0799	Mean in Log Scale	-2.648
SD in Original Scale	0.0355	SD in Log Scale	0.556
95% UTL95% Coverage	0.324	95% UPL (t)	0.2
90% Percentile (z)	0.144	95% Percentile (z)	0.177
99% Percentile (z)	0.258	95% USL	0.252

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	0.231
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.231
95% USL	0.231	95% KM Chebyshev UPL	0.124

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Result (metals - chromium)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	12		
Number of Detects	6	Number of Non-Detects	6
Number of Distinct Detects	6	Number of Distinct Non-Detects	6
Minimum Detect	2.05	Minimum Non-Detect	3.99
Maximum Detect	5.08	Maximum Non-Detect	4.34
Variance Detected	1.535	Percent Non-Detects	50%
Mean Detected	3.945	SD Detected	1.239
Mean of Detected Logged Data	1.323	SD of Detected Logged Data	0.359

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.867	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.287	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	3.426	KM SD	1.053
95% UTL95% Coverage	6.306	95% KM UPL (t)	5.393
90% KM Percentile (z)	4.775	95% KM Percentile (z)	5.157
99% KM Percentile (z)	5.875	95% KM USL	5.831

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	3.018	SD	1.279
95% UTL95% Coverage	6.518	95% UPL (t)	5.409
90% Percentile (z)	4.658	95% Percentile (z)	5.122
99% Percentile (z)	5.994	95% USL	5.941

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.49	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.698	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.302	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.332	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	10.37	k star (bias corrected MLE)	5.294
Theta hat (MLE)	0.381	Theta star (bias corrected MLE)	0.745
nu hat (MLE)	124.4	nu star (bias corrected)	63.53
MLE Mean (bias corrected)	3.945		
MLE Sd (bias corrected)	1.715	95% Percentile of Chisquare (2kstar)	19.11

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	2.05	Mean	3.45
Maximum	5.08	Median	2.954
SD	0.983	CV	0.285
k hat (MLE)	14.48	k star (bias corrected MLE)	10.92
Theta hat (MLE)	0.238	Theta star (bias corrected MLE)	0.316
nu hat (MLE)	347.5	nu star (bias corrected)	262
MLE Mean (bias corrected)	3.45	MLE Sd (bias corrected)	1.044
95% Percentile of Chisquare (2kstar)	33.71	90% Percentile	4.837
95% Percentile	5.327	99% Percentile	6.33

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	6.619	6.705	95% Approx. Gamma UPL	5.43	5.456
95% Gamma USL	5.981	6.031			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	3.426	SD (KM)	1.053
Variance (KM)	1.108	SE of Mean (KM)	0.413
k hat (KM)	10.59	k star (KM)	7.999
nu hat (KM)	254.2	nu star (KM)	192
theta hat (KM)	0.323	theta star (KM)	0.428
80% gamma percentile (KM)	4.382	90% gamma percentile (KM)	5.041
95% gamma percentile (KM)	5.631	99% gamma percentile (KM)	6.852

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	7.071	7.218	95% Approx. Gamma UPL	5.676	5.726
95% KM Gamma Percentile	5.347	5.381	95% Gamma USL	6.319	6.41

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.853	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.276	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	3.399	Mean in Log Scale	1.186
SD in Original Scale	1.012	SD in Log Scale	0.282
95% UTL95% Coverage	7.071	95% BCA UTL95% Coverage	5.08
95% Bootstrap (%) UTL95% Coverage	5.08	95% UPL (t)	5.54
90% Percentile (z)	4.695	95% Percentile (z)	5.201
99% Percentile (z)	6.301	95% USL	6.228

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	1.182	95% KM UTL (Lognormal)95% Coverage	7.786
KM SD of Logged Data	0.318	95% KM UPL (Lognormal)	5.91
95% KM Percentile Lognormal (z)	5.503	95% KM USL (Lognormal)	6.745

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	3.018	Mean in Log Scale	1.031
SD in Original Scale	1.279	SD in Log Scale	0.391
95% UTL95% Coverage	8.159	95% UPL (t)	5.816
90% Percentile (z)	4.623	95% Percentile (z)	5.328
99% Percentile (z)	6.953	95% USL	6.841

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	5.08
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	5.08
95% USL	5.08	95% KM Chebyshev UPL	8.202

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (metals - copper)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	12		
Number of Detects	6	Number of Non-Detects	6
Number of Distinct Detects	6	Number of Distinct Non-Detects	6
Minimum Detect	1.14	Minimum Non-Detect	3.55
Maximum Detect	2.17	Maximum Non-Detect	3.86
Variance Detected	0.121	Percent Non-Detects	50%
Mean Detected	1.798	SD Detected	0.349
Mean of Detected Logged Data	0.568	SD of Detected Logged Data	0.224

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.832	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.335	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Data Not Normal at 5% Significance Level	

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	1.798	KM SD	0.318
95% UTL95% Coverage	2.669	95% KM UPL (t)	2.393
90% KM Percentile (z)	2.206	95% KM Percentile (z)	2.322
99% KM Percentile (z)	2.539	95% KM USL	2.525

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	1.829	SD	0.24
95% UTL95% Coverage	2.485	95% UPL (t)	2.277
90% Percentile (z)	2.136	95% Percentile (z)	2.223
99% Percentile (z)	2.387	95% USL	2.377

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.726	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.697	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.361	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.332	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	26.52	k star (bias corrected MLE)	13.37
Theta hat (MLE)	0.0678	Theta star (bias corrected MLE)	0.134
nu hat (MLE)	318.3	nu star (bias corrected)	160.5
MLE Mean (bias corrected)	1.798		
MLE Sd (bias corrected)	0.492	95% Percentile of Chisquare (2kstar)	39.8

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	1.14	Mean	1.792
Maximum	2.17	Median	1.786
SD	0.235	CV	0.131
k hat (MLE)	52.84	k star (bias corrected MLE)	39.69
Theta hat (MLE)	0.0339	Theta star (bias corrected MLE)	0.0452
nu hat (MLE)	1268	nu star (bias corrected)	952.5
MLE Mean (bias corrected)	1.792	MLE Sd (bias corrected)	0.284
95% Percentile of Chisquare (2kstar)	101.2	90% Percentile	2.165
95% Percentile	2.284	99% Percentile	2.519

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	2.578	2.602	95% Approx. Gamma UPL	2.304	2.316
95% Gamma USL	2.433	2.45			

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	1.798	SD (KM)	0.318
Variance (KM)	0.101	SE of Mean (KM)	0.142
k hat (KM)	31.94	k star (KM)	24.01
nu hat (KM)	766.6	nu star (KM)	576.3
theta hat (KM)	0.0563	theta star (KM)	0.0749
80% gamma percentile (KM)	2.098	90% gamma percentile (KM)	2.282
95% gamma percentile (KM)	2.441	99% gamma percentile (KM)	2.76

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	2.902	2.943	95% Approx. Gamma UPL	2.505	2.524
95% KM Gamma Percentile	2.409	2.423	95% Gamma USL	2.691	2.719

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.77	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.369	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Data Not Lognormal at 5% Significance Level	

Data Not Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	1.781	Mean in Log Scale	0.568
SD in Original Scale	0.236	SD in Log Scale	0.151
95% UTL95% Coverage	2.668	95% BCA UTL95% Coverage	2.17
95% Bootstrap (%) UTL95% Coverage	2.17	95% UPL (t)	2.34
90% Percentile (z)	2.142	95% Percentile (z)	2.262
99% Percentile (z)	2.508	95% USL	2.492

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	0.568	95% KM UTL (Lognormal)95% Coverage	3.088
KM SD of Logged Data	0.205	95% KM UPL (Lognormal)	2.587
95% KM Percentile Lognormal (z)	2.471	95% KM USL (Lognormal)	2.816

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	1.829	Mean in Log Scale	0.594
SD in Original Scale	0.24	SD in Log Scale	0.155
95% UTL95% Coverage	2.766	95% UPL (t)	2.419
90% Percentile (z)	2.209	95% Percentile (z)	2.336
99% Percentile (z)	2.596	95% USL	2.579

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	3.86
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	3.86
95% USL	3.86	95% KM Chebyshev UPL	3.242

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result (metals - iron)

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

General Statistics

Total Number of Observations	12	Number of Distinct Observations	12
Minimum	1890	First Quartile	2370
Second Largest	5310	Median	2765
Maximum	5330	Third Quartile	3948
Mean	3224	SD	1282
Coefficient of Variation	0.398	Skewness	0.831
Mean of logged Data	8.011	SD of logged Data	0.378

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test

Shapiro Wilk Test Statistic	0.847	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.211	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	6731	90% Percentile (z)	4867
95% UPL (t)	5620	95% Percentile (z)	5332
95% USL	6153	99% Percentile (z)	6206

Gamma GOF Test

A-D Test Statistic	0.577	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.731	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.168	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.246	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	7.562	k star (bias corrected MLE)	5.727
Theta hat (MLE)	426.4	Theta star (bias corrected MLE)	563
nu hat (MLE)	181.5	nu star (bias corrected)	137.4
MLE Mean (bias corrected)	3224	MLE Sd (bias corrected)	1347

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	5882	90% Percentile	5026
95% Hawkins Wixley (HW) Approx. Gamma UPL	5930	95% Percentile	5712
95% WH Approx. Gamma UTL with 95% Coverage	7616	99% Percentile	7151
95% HW Approx. Gamma UTL with 95% Coverage	7790		
95% WH USL	6676	95% HW USL	6775

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.899	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.151	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage	8471	90% Percentile (z)	4890
95% UPL (t)	6106	95% Percentile (z)	5610
95% USL	7144	99% Percentile (z)	7257

Nonparametric Distribution Free Background Statistics

Data appear Approximate Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	12	95% UTL with 95% Coverage	5330
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	5330	95% BCA Bootstrap UTL with 95% Coverage	5330
95% UPL	5330	90% Percentile	5269
90% Chebyshev UPL	7226	95% Percentile	5319
95% Chebyshev UPL	9039	99% Percentile	5328
95% USL	5330		

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (metals - lead)

General Statistics

Total Number of Observations	12	Number of Distinct Observations	12
Minimum	1.3	First Quartile	1.725
Second Largest	4.2	Median	2
Maximum	4.5	Third Quartile	3.15
Mean	2.48	SD	1.156
Coefficient of Variation	0.466	Skewness	0.892
Mean of logged Data	0.816	SD of logged Data	0.44

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test

Shapiro Wilk Test Statistic	0.84	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.238	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	5.642	90% Percentile (z)	3.961
95% UPL (t)	4.64	95% Percentile (z)	4.381
95% USL	5.121	99% Percentile (z)	5.169

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Gamma GOF Test

A-D Test Statistic	0.616	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.732	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.211	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.246	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	5.594	k star (bias corrected MLE)	4.251
Theta hat (MLE)	0.443	Theta star (bias corrected MLE)	0.583
nu hat (MLE)	134.3	nu star (bias corrected)	102
MLE Mean (bias corrected)	2.48	MLE Sd (bias corrected)	1.203

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	4.904	90% Percentile	4.092
95% Hawkins Wixley (HW) Approx. Gamma UPL	4.954	95% Percentile	4.731
95% WH Approx. Gamma UTL with 95% Coverage	6.559	99% Percentile	6.092
95% HW Approx. Gamma UTL with 95% Coverage	6.75		
95% WH USL	5.658	95% HW USL	5.764

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.903	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.185	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage	7.536	90% Percentile (z)	3.975
95% UPL (t)	5.147	95% Percentile (z)	4.664
95% USL	6.18	99% Percentile (z)	6.294

Nonparametric Distribution Free Background Statistics

Data appear Approximate Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	12	95% UTL with 95% Coverage	4.5
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	4.5	95% BCA Bootstrap UTL with 95% Coverage	4.5
95% UPL	4.5	90% Percentile	4.188
90% Chebyshev UPL	6.089	95% Percentile	4.335
95% Chebyshev UPL	7.723	99% Percentile	4.467
95% USL	4.5		

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (metals - manganese)

General Statistics

Total Number of Observations	12	Number of Distinct Observations	12
Minimum	19.7	First Quartile	24.03
Second Largest	41.5	Median	36.85
Maximum	47	Third Quartile	39.83
Mean	33.68	SD	9.009
Coefficient of Variation	0.268	Skewness	-0.32
Mean of logged Data	3.48	SD of logged Data	0.29

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Normal GOF Test

Shapiro Wilk Test Statistic	0.907	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.215	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	58.32	90% Percentile (z)	45.22
95% UPL (t)	50.52	95% Percentile (z)	48.49
95% USL	54.26	99% Percentile (z)	54.63

Gamma GOF Test

A-D Test Statistic	0.686	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.731	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.235	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.245	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	13.86	k star (bias corrected MLE)	10.45
Theta hat (MLE)	2.43	Theta star (bias corrected MLE)	3.223
nu hat (MLE)	332.6	nu star (bias corrected)	250.8
MLE Mean (bias corrected)	33.68	MLE Sd (bias corrected)	10.42

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	53.52	90% Percentile	47.52
95% Hawkins Wixley (HW) Approx. Gamma UPL	54.03	95% Percentile	52.44
95% WH Approx. Gamma UTL with 95% Coverage	65.48	99% Percentile	62.51
95% HW Approx. Gamma UTL with 95% Coverage	66.8		
95% WH USL	59.06	95% HW USL	59.9

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.884	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.231	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage	71.79	90% Percentile (z)	47.08
95% UPL (t)	55.83	95% Percentile (z)	52.32
95% USL	62.99	99% Percentile (z)	63.75

Nonparametric Distribution Free Background Statistics

Data appear Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	12	95% UTL with 95% Coverage	47
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	47	95% BCA Bootstrap UTL with 95% Coverage	47
95% UPL	47	90% Percentile	41.46
90% Chebyshev UPL	61.81	95% Percentile	43.98
95% Chebyshev UPL	74.55	99% Percentile	46.4
95% USL	47		

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result (metals - uranium)

General Statistics

Total Number of Observations	12	Number of Distinct Observations	12
Minimum	0.126	First Quartile	0.282
Second Largest	0.461	Median	0.402
Maximum	0.466	Third Quartile	0.435
Mean	0.349	SD	0.123
Coefficient of Variation	0.353	Skewness	-0.959
Mean of logged Data	-1.133	SD of logged Data	0.458

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Normal GOF Test

Shapiro Wilk Test Statistic	0.834	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.218	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.243	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	0.686	90% Percentile (z)		0.507
95% UPL (t)		0.579	95% Percentile (z)		0.552
95% USL		0.631	99% Percentile (z)		0.636

Gamma GOF Test

A-D Test Statistic	1.112	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.732	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.264	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.246	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	6.368	k star (bias corrected MLE)	4.831
Theta hat (MLE)	0.0548	Theta star (bias corrected MLE)	0.0723
nu hat (MLE)	152.8	nu star (bias corrected)	116
MLE Mean (bias corrected)	0.349	MLE Sd (bias corrected)	0.159

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL		0.667	90% Percentile		0.562
95% Hawkins Wixley (HW) Approx. Gamma UPL		0.685	95% Percentile		0.645
95% WH Approx. Gamma UTL with	95% Coverage	0.879	99% Percentile		0.82
95% HW Approx. Gamma UTL with	95% Coverage	0.924			
95% WH USL		0.764	95% HW USL		0.793

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.78	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.274	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.243	Data Not Lognormal at 5% Significance Level	

Data Not Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with	95% Coverage	1.126	90% Percentile (z)		0.579
95% UPL (t)		0.757	95% Percentile (z)		0.684
95% USL		0.916	99% Percentile (z)		0.934

Nonparametric Distribution Free Background Statistics

Data appear Approximate Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r		12	95% UTL with	95% Coverage	0.466
Approx, f used to compute achieved CC		0.632	Approximate Actual Confidence Coefficient achieved by UTL		0.46
			Approximate Sample Size needed to achieve specified CC		59
95% Percentile Bootstrap UTL with	95% Coverage	0.466	95% BCA Bootstrap UTL with	95% Coverage	0.466
95% UPL		0.466	90% Percentile		0.461
90% Chebyshev UPL		0.734	95% Percentile		0.463
95% Chebyshev UPL		0.908	99% Percentile		0.465
95% USL		0.466			

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Result (metals - zinc)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	12		
Number of Detects	6	Number of Non-Detects	6
Number of Distinct Detects	6	Number of Distinct Non-Detects	6
Minimum Detect	4.52	Minimum Non-Detect	17.7
Maximum Detect	9.82	Maximum Non-Detect	19.3
Variance Detected	4.017	Percent Non-Detects	50%
Mean Detected	7.843	SD Detected	2.004
Mean of Detected Logged Data	2.028	SD of Detected Logged Data	0.29

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.908	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.189	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	7.843	KM SD	1.83
95% UTL95% Coverage	12.85	95% KM UPL (t)	11.26
90% KM Percentile (z)	10.19	95% KM Percentile (z)	10.85
99% KM Percentile (z)	12.1	95% KM USL	12.02

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	8.568	SD	1.559
95% UTL95% Coverage	12.83	95% UPL (t)	11.48
90% Percentile (z)	10.57	95% Percentile (z)	11.13
99% Percentile (z)	12.19	95% USL	12.13

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.405	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.698	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.214	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.332	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	15.74	k star (bias corrected MLE)	7.979
Theta hat (MLE)	0.498	Theta star (bias corrected MLE)	0.983
nu hat (MLE)	188.8	nu star (bias corrected)	95.75
MLE Mean (bias corrected)	7.843		
MLE Sd (bias corrected)	2.777	95% Percentile of Chisquare (2kstar)	26.24

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	4.52	Mean	7.792
Maximum	9.82	Median	7.741
SD	1.352	CV	0.174
k hat (MLE)	31.27	k star (bias corrected MLE)	23.51
Theta hat (MLE)	0.249	Theta star (bias corrected MLE)	0.331
nu hat (MLE)	750.4	nu star (bias corrected)	564.1
MLE Mean (bias corrected)	7.792	MLE Sd (bias corrected)	1.607
95% Percentile of Chisquare (2kstar)	64.01	90% Percentile	9.909
95% Percentile	10.61	99% Percentile	12.01

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	12.38	12.53	95% Approx. Gamma UPL	10.74	10.81
95% Gamma USL	11.5	11.61			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	7.843	SD (KM)	1.83
Variance (KM)	3.348	SE of Mean (KM)	0.818
k hat (KM)	18.38	k star (KM)	13.84
nu hat (KM)	441	nu star (KM)	332.1
theta hat (KM)	0.427	theta star (KM)	0.567
80% gamma percentile (KM)	9.541	90% gamma percentile (KM)	10.64
95% gamma percentile (KM)	11.6	99% gamma percentile (KM)	13.56

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	14.35	14.63	95% Approx. Gamma UPL	11.93	12.05
95% KM Gamma Percentile	11.36	11.44	95% Gamma USL	13.05	13.24

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.864	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.241	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	7.719	Mean in Log Scale	2.028
SD in Original Scale	1.357	SD in Log Scale	0.196
95% UTL95% Coverage	12.97	95% BCA UTL95% Coverage	9.82
95% Bootstrap (%) UTL95% Coverage	9.82	95% UPL (t)	10.95
90% Percentile (z)	9.759	95% Percentile (z)	10.48
99% Percentile (z)	11.97	95% USL	11.87

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	2.028	95% KM UTL (Lognormal)95% Coverage	15.67
KM SD of Logged Data	0.265	95% KM UPL (Lognormal)	12.46
95% KM Percentile Lognormal (z)	11.74	95% KM USL (Lognormal)	13.91

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	8.568	Mean in Log Scale	2.128
SD in Original Scale	1.559	SD in Log Scale	0.223
95% UTL95% Coverage	15.45	95% UPL (t)	12.74
90% Percentile (z)	11.18	95% Percentile (z)	12.12
99% Percentile (z)	14.11	95% USL	13.98

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

ARCADIS Design & Consultancy for natural and built assets

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	19.3
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	19.3
95% USL	19.3	95% KM Chebyshev UPL	16.14

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (perchlorate - perchlorate)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	11		
Number of Detects	8	Number of Non-Detects	4
Number of Distinct Detects	8	Number of Distinct Non-Detects	3
Minimum Detect	1.0700E-4	Minimum Non-Detect	8.0000E-5
Maximum Detect	2.2300E-4	Maximum Non-Detect	8.2200E-5
Variance Detected	2.0097E-9	Percent Non-Detects	33.33%
Mean Detected	1.6263E-4	SD Detected	4.4830E-5
Mean of Detected Logged Data	-8.757	SD of Detected Logged Data	0.275

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.9	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.184	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	1.3508E-4	KM SD	5.1860E-5
95% UTL95% Coverage	2.7697E-4	95% KM UPL (t)	2.3202E-4
90% KM Percentile (z)	2.0154E-4	95% KM Percentile (z)	2.2038E-4
99% KM Percentile (z)	2.5573E-4	95% KM USL	2.5358E-4

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	1.2193E-4	SD	6.9946E-5
95% UTL95% Coverage	3.1330E-4	95% UPL (t)	2.5267E-4
90% Percentile (z)	2.1157E-4	95% Percentile (z)	2.3698E-4
99% Percentile (z)	2.8465E-4	95% USL	2.8175E-4

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.371	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.716	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.185	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.294	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	15.23	k star (bias corrected MLE)	9.604
Theta hat (MLE)	1.0676E-5	Theta star (bias corrected MLE)	1.6934E-5
nu hat (MLE)	243.7	nu star (bias corrected)	153.7
MLE Mean (bias corrected)	1.6263E-4		
MLE Sd (bias corrected)	5.2477E-5	95% Percentile of Chisquare (2kstar)	30.41

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	1.0700E-4	Mean	0.00344
Maximum	0.01	Median	2.0850E-4
SD	0.00484	CV	1.407
k hat (MLE)	0.389	k star (bias corrected MLE)	0.347
Theta hat (MLE)	0.00886	Theta star (bias corrected MLE)	0.00992
nu hat (MLE)	9.326	nu star (bias corrected)	8.328
MLE Mean (bias corrected)	0.00344	MLE Sd (bias corrected)	0.00584
95% Percentile of Chisquare (2kstar)	3.026	90% Percentile	0.00995
95% Percentile	0.015	99% Percentile	0.0279

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.0345	0.0431	95% Approx. Gamma UPL	0.0169	0.0184
95% Gamma USL	0.0243	0.0283			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	1.3508E-4	SD (KM)	5.1860E-5
Variance (KM)	2.6894E-9	SE of Mean (KM)	1.6004E-5
k hat (KM)	6.785	k star (KM)	5.144
nu hat (KM)	162.8	nu star (KM)	123.5
theta hat (KM)	1.9909E-5	theta star (KM)	2.6259E-5
80% gamma percentile (KM)	1.8101E-4	90% gamma percentile (KM)	2.1480E-4
95% gamma percentile (KM)	2.4557E-4	99% gamma percentile (KM)	3.1050E-4

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	3.1704E-4	3.2507E-4	95% Approx. Gamma UPL	2.4507E-4	2.4748E-4
95% KM Gamma Percentile	2.2841E-4	2.2989E-4	95% Gamma USL	2.7805E-4	2.8272E-4

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.924	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.173	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	1.3463E-4	Mean in Log Scale	-8.989
SD in Original Scale	5.4786E-5	SD in Log Scale	0.41
95% UTL95% Coverage	3.8266E-4	95% BCA UTL95% Coverage	2.2300E-4
95% Bootstrap (%) UTL95% Coverage	2.2300E-4	95% UPL (t)	2.6828E-4
90% Percentile (z)	2.1087E-4	95% Percentile (z)	2.4472E-4
99% Percentile (z)	3.2354E-4	95% USL	3.1810E-4

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-8.983	95% KM UTL (Lognormal)95% Coverage	3.5699E-4
KM SD of Logged Data	0.382	95% KM UPL (Lognormal)	2.5639E-4
95% KM Percentile Lognormal (z)	2.3533E-4	95% KM USL (Lognormal)	3.0050E-4

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	1.2193E-4	Mean in Log Scale	-9.209
SD in Original Scale	6.9946E-5	SD in Log Scale	0.703
95% UTL95% Coverage	6.8505E-4	95% UPL (t)	3.7248E-4
90% Percentile (z)	2.4643E-4	95% Percentile (z)	3.1813E-4
99% Percentile (z)	5.1364E-4	95% USL	4.9891E-4

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	2.2300E-4
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	2.2300E-4
95% USL	2.2300E-4	95% KM Chebyshev UPL	3.7036E-4

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Result (radium-226 & other gamma emitters - combined radium 226/228)

General Statistics

Total Number of Observations	12	Number of Distinct Observations	12
Minimum	0.532	First Quartile	0.733
Second Largest	0.987	Median	0.917
Maximum	1.15	Third Quartile	0.973
Mean	0.858	SD	0.18
Coefficient of Variation	0.21	Skewness	-0.443
Mean of logged Data	-0.175	SD of logged Data	0.227

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test

Shapiro Wilk Test Statistic	0.944	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.859	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.169	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.243	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	1.351	90% Percentile (z)		1.089
95% UPL (t)		1.195	95% Percentile (z)		1.154
95% USL		1.269	99% Percentile (z)		1.277

Gamma GOF Test

A-D Test Statistic	0.499	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.732	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.195	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.245	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	22.57	k star (bias corrected MLE)	16.98
Theta hat (MLE)	0.038	Theta star (bias corrected MLE)	0.0505
nu hat (MLE)	541.6	nu star (bias corrected)	407.5
MLE Mean (bias corrected)	0.858	MLE Sd (bias corrected)	0.208

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL		1.245	90% Percentile		1.133
95% Hawkins Wixley (HW) Approx. Gamma UPL		1.253	95% Percentile		1.227
95% WH Approx. Gamma UTL with	95% Coverage	1.467	99% Percentile		1.415
95% HW Approx. Gamma UTL with	95% Coverage	1.487			
95% WH USL		1.348	95% HW USL		1.362

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.916	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.859	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.199	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.243	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with	95% Coverage	1.561	90% Percentile (z)		1.122
95% UPL (t)		1.282	95% Percentile (z)		1.218
95% USL		1.409	99% Percentile (z)		1.422

Nonparametric Distribution Free Background Statistics

Data appear Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r		12	95% UTL with	95% Coverage	1.15
Approx, f used to compute achieved CC		0.632	Approximate Actual Confidence Coefficient achieved by UTL		0.46
			Approximate Sample Size needed to achieve specified CC		59
95% Percentile Bootstrap UTL with	95% Coverage	1.15	95% BCA Bootstrap UTL with	95% Coverage	1.15
95% UPL		1.15	90% Percentile		0.987
90% Chebyshev UPL		1.42	95% Percentile		1.06
95% Chebyshev UPL		1.675	99% Percentile		1.132
95% USL		1.15			

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data represents a background data set and when many onsite observations need to be compared with the BTV.

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Result (radium-226 & other gamma emitters - radium-226)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	12		
Number of Detects	11	Number of Non-Detects	1
Number of Distinct Detects	11	Number of Distinct Non-Detects	1
Minimum Detect	0.297	Minimum Non-Detect	0.171
Maximum Detect	1.09	Maximum Non-Detect	0.171
Variance Detected	0.0674	Percent Non-Detects	8.333%
Mean Detected	0.663	SD Detected	0.26
Mean of Detected Logged Data	-0.492	SD of Detected Logged Data	0.441

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.928	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.85	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.161	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.251	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.622	KM SD	0.273
95% UTL95% Coverage	1.37	95% KM UPL (t)	1.133
90% KM Percentile (z)	0.973	95% KM Percentile (z)	1.072
99% KM Percentile (z)	1.258	95% KM USL	1.247

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.615	SD	0.299
95% UTL95% Coverage	1.432	95% UPL (t)	1.173
90% Percentile (z)	0.998	95% Percentile (z)	1.106
99% Percentile (z)	1.31	95% USL	1.297

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.556	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.731	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.209	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.256	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	6.305	k star (bias corrected MLE)	4.646
Theta hat (MLE)	0.105	Theta star (bias corrected MLE)	0.143
nu hat (MLE)	138.7	nu star (bias corrected)	102.2
MLE Mean (bias corrected)	0.663		
MLE Sd (bias corrected)	0.308	95% Percentile of Chisquare (2kstar)	17.33

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.175	Mean	0.623
Maximum	1.09	Median	0.7
SD	0.285	CV	0.458
k hat (MLE)	4.248	k star (bias corrected MLE)	3.242
Theta hat (MLE)	0.147	Theta star (bias corrected MLE)	0.192
nu hat (MLE)	102	nu star (bias corrected)	77.8
MLE Mean (bias corrected)	0.623	MLE Sd (bias corrected)	0.346
95% Percentile of Chisquare (2kstar)	13.31	90% Percentile	1.086
95% Percentile	1.278	99% Percentile	1.693

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.847	1.959	95% Approx. Gamma UPL	1.338	1.378
95% Gamma USL	1.568	1.638			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.622	SD (KM)	0.273
Variance (KM)	0.0747	SE of Mean (KM)	0.0828
k hat (KM)	5.184	k star (KM)	3.944
nu hat (KM)	124.4	nu star (KM)	94.65
theta hat (KM)	0.12	theta star (KM)	0.158
80% gamma percentile (KM)	0.859	90% gamma percentile (KM)	1.042
95% gamma percentile (KM)	1.211	99% gamma percentile (KM)	1.571

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.779	1.881	95% Approx. Gamma UPL	1.3	1.337
95% KM Gamma Percentile	1.192	1.218	95% Gamma USL	1.517	1.58

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.895	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.85	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.228	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.251	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.626	Mean in Log Scale	-0.579
SD in Original Scale	0.279	SD in Log Scale	0.517
95% UTL95% Coverage	2.307	95% BCA UTL95% Coverage	1.09
95% Bootstrap (%) UTL95% Coverage	1.09	95% UPL (t)	1.474
90% Percentile (z)	1.087	95% Percentile (z)	1.312
99% Percentile (z)	1.866	95% USL	1.827

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-0.598	95% KM UTL (Lognormal)95% Coverage	2.375
KM SD of Logged Data	0.535	95% KM UPL (Lognormal)	1.494
95% KM Percentile Lognormal (z)	1.325	95% KM USL (Lognormal)	1.866

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.615	Mean in Log Scale	-0.656
SD in Original Scale	0.299	SD in Log Scale	0.707
95% UTL95% Coverage	3.587	95% UPL (t)	1.944
90% Percentile (z)	1.284	95% Percentile (z)	1.659
99% Percentile (z)	2.686	95% USL	2.608

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	1.09
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	1.09
95% USL	1.09	95% KM Chebyshev UPL	1.862

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (radium-226 & other gamma emitters - radium-228)

General Statistics

Total Number of Observations	12	Number of Missing Observations	0
Number of Distinct Observations	12		
Number of Detects	6	Number of Non-Detects	6
Number of Distinct Detects	6	Number of Distinct Non-Detects	6
Minimum Detect	0.176	Minimum Non-Detect	0.0506
Maximum Detect	0.583	Maximum Non-Detect	0.324
Variance Detected	0.0301	Percent Non-Detects	50%
Mean Detected	0.337	SD Detected	0.174
Mean of Detected Logged Data	-1.196	SD of Detected Logged Data	0.499

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.736	d2max (for USL)	2.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.839	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.251	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.325	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.2	KM SD	0.18
95% UTL95% Coverage	0.692	95% KM UPL (t)	0.536
90% KM Percentile (z)	0.431	95% KM Percentile (z)	0.496
99% KM Percentile (z)	0.618	95% KM USL	0.611

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.202	SD	0.186
95% UTL95% Coverage	0.711	95% UPL (t)	0.55
90% Percentile (z)	0.44	95% Percentile (z)	0.508
99% Percentile (z)	0.635	95% USL	0.627

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.485	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.698	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.266	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.333	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	4.849	k star (bias corrected MLE)	2.536
Theta hat (MLE)	0.0694	Theta star (bias corrected MLE)	0.133
nu hat (MLE)	58.19	nu star (bias corrected)	30.43
MLE Mean (bias corrected)	0.337		
MLE Sd (bias corrected)	0.211	95% Percentile of Chisquare (2kstar)	11.18

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.18
Maximum	0.583	Median	0.133
SD	0.202	CV	1.125
k hat (MLE)	0.614	k star (bias corrected MLE)	0.516
Theta hat (MLE)	0.293	Theta star (bias corrected MLE)	0.348
nu hat (MLE)	14.74	nu star (bias corrected)	12.39
MLE Mean (bias corrected)	0.18	MLE Sd (bias corrected)	0.25
95% Percentile of Chisquare (2kstar)	3.922	90% Percentile	0.483
95% Percentile	0.683	99% Percentile	1.173

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	1.457	1.825	95% Approx. Gamma UPL	0.785	0.88
95% Gamma USL	1.073	1.27			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.2	SD (KM)	0.18
Variance (KM)	0.0323	SE of Mean (KM)	0.0576
k hat (KM)	1.239	k star (KM)	0.985
nu hat (KM)	29.74	nu star (KM)	23.64
theta hat (KM)	0.162	theta star (KM)	0.203
80% gamma percentile (KM)	0.323	90% gamma percentile (KM)	0.463
95% gamma percentile (KM)	0.603	99% gamma percentile (KM)	0.929

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	0.994	1.092	95% Approx. Gamma UPL	0.616	0.64
95% KM Gamma Percentile	0.537	0.55	95% Gamma USL	0.782	0.834

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.884	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.241	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.216	Mean in Log Scale	-1.784
SD in Original Scale	0.173	SD in Log Scale	0.711
95% UTL95% Coverage	1.175	95% BCA UTL95% Coverage	0.583
95% Bootstrap (%) UTL95% Coverage	0.583	95% UPL (t)	0.635
90% Percentile (z)	0.418	95% Percentile (z)	0.541
99% Percentile (z)	0.878	95% USL	0.853

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-2.035	95% KM UTL (Lognormal)95% Coverage	1.714
KM SD of Logged Data	0.941	95% KM UPL (Lognormal)	0.759
95% KM Percentile Lognormal (z)	0.614	95% KM USL (Lognormal)	1.122

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Included
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.202	Mean in Log Scale	-2.051
SD in Original Scale	0.186	SD in Log Scale	1.061
95% UTL95% Coverage	2.347	95% UPL (t)	0.935
90% Percentile (z)	0.501	95% Percentile (z)	0.737
99% Percentile (z)	1.52	95% USL	1.454

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	12	95% UTL with95% Coverage	0.583
Approx, f used to compute achieved CC	0.632	Approximate Actual Confidence Coefficient achieved by UTL	0.46
Approximate Sample Size needed to achieve specified CC	59	95% UPL	0.583
95% USL	0.583	95% KM Chebyshev UPL	1.016

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Background Statistics for Uncensored Full Data Sets

User Selected Options

Date/Time of Computation	ProUCL 5.17/26/2021 7:31:50 AM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
New or Future K Observations	1
Number of Bootstrap Operations	2000

Result (general chemistry - soluble - sulfate)

General Statistics

Total Number of Observations	11	Number of Distinct Observations	11
Minimum	18	First Quartile	36.6
Second Largest	125	Median	51.1
Maximum	158	Third Quartile	75.3
Mean	63.76	SD	43.49
Coefficient of Variation	0.682	Skewness	1.274
Mean of logged Data	3.955	SD of logged Data	0.667

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.815	d2max (for USL)	2.234

Normal GOF Test

Shapiro Wilk Test Statistic	0.867	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.85	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.239	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.251	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with	95% Coverage	186.2	90% Percentile (z)	119.5
95% UPL (t)		146.1	95% Percentile (z)	135.3
95% USL		160.9	99% Percentile (z)	164.9

Gamma GOF Test

A-D Test Statistic	0.286	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.735	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.176	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.258	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	2.655	k star (bias corrected MLE)	1.991
Theta hat (MLE)	24.02	Theta star (bias corrected MLE)	32.02
nu hat (MLE)	58.41	nu star (bias corrected)	43.81
MLE Mean (bias corrected)	63.76	MLE Sd (bias corrected)	45.18

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	161.5	90% Percentile	124.1
95% Hawkins Wixley (HW) Approx. Gamma UPL	165.6	95% Percentile	151.4
95% WH Approx. Gamma UTL with 95% Coverage	242.5	99% Percentile	212
95% HW Approx. Gamma UTL with 95% Coverage	258.2		
95% WH USL	188.9	95% HW USL	196.3

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.969	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.85	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.14	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.251	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with	95% Coverage	341.6	90% Percentile (z)	122.8
95% UPL (t)		184.6	95% Percentile (z)	156.4
95% USL		231.8	99% Percentile (z)	246.5

Nonparametric Distribution Free Background Statistics

Data appear Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r		11	95% UTL with	95% Coverage	158
Approx, f used to compute achieved CC		0.579	Approximate Actual Confidence Coefficient achieved by UTL		0.431
			Approximate Sample Size needed to achieve specified CC		59
95% Percentile Bootstrap UTL with	95% Coverage	158	95% BCA Bootstrap UTL with	95% Coverage	158
95% UPL		158	90% Percentile		125
90% Chebyshev UPL		200	95% Percentile		141.5
95% Chebyshev UPL		261.8	99% Percentile		154.7
95% USL		158			

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (general chemistry - soluble - nitrate as n)

General Statistics

Total Number of Observations	9	Number of Distinct Observations	9
Minimum	1.52	First Quartile	1.77
Second Largest	2.69	Median	2.05
Maximum	2.83	Third Quartile	2.5
Mean	2.109	SD	0.477
Coefficient of Variation	0.226	Skewness	0.315
Mean of logged Data	0.723	SD of logged Data	0.227

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	3.031	d2max (for USL)	2.11

Normal GOF Test

Shapiro Wilk Test Statistic	0.937	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.127	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	3.556	90% Percentile (z)	2.721
95% UPL (t)	3.045	95% Percentile (z)	2.894
95% USL	3.116	99% Percentile (z)	3.219

Gamma GOF Test

A-D Test Statistic	0.252	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.721	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.147	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.279	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	22.1	k star (bias corrected MLE)	14.81
Theta hat (MLE)	0.0954	Theta star (bias corrected MLE)	0.142
nu hat (MLE)	397.8	nu star (bias corrected)	266.5
MLE Mean (bias corrected)	2.109	MLE Sd (bias corrected)	0.548

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	3.145	90% Percentile	2.835
95% Hawkins Wixley (HW) Approx. Gamma UPL	3.161	95% Percentile	3.084
95% WH Approx. Gamma UTL with 95% Coverage	3.858	99% Percentile	3.588
95% HW Approx. Gamma UTL with 95% Coverage	3.91		
95% WH USL	3.238	95% HW USL	3.258

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.945	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.136	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.274	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Background Statistics assuming Lognormal Distribution

95% UTL with 95% Coverage	4.098	90% Percentile (z)	2.756
95% UPL (t)	3.215	95% Percentile (z)	2.993
95% USL	3.325	99% Percentile (z)	3.493

Nonparametric Distribution Free Background Statistics

Data appear Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r	9	95% UTL with 95% Coverage	2.83
Approx, f used to compute achieved CC	0.474	Approximate Actual Confidence Coefficient achieved by UTL	0.37
		Approximate Sample Size needed to achieve specified CC	59
95% Percentile Bootstrap UTL with 95% Coverage	2.83	95% BCA Bootstrap UTL with 95% Coverage	2.83
95% UPL	2.83	90% Percentile	2.718
90% Chebyshev UPL	3.619	95% Percentile	2.774
95% Chebyshev UPL	4.302	99% Percentile	2.819
95% USL	2.83		

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (general chemistry - phenols, total)

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

General Statistics

Total Number of Observations	11	Number of Missing Observations	0
Number of Distinct Observations	8		
Number of Detects	5	Number of Non-Detects	6
Number of Distinct Detects	5	Number of Distinct Non-Detects	3
Minimum Detect	0.358	Minimum Non-Detect	0.334
Maximum Detect	2.4	Maximum Non-Detect	0.338
Variance Detected	1.091	Percent Non-Detects	54.55%
Mean Detected	1.159	SD Detected	1.044
Mean of Detected Logged Data	-0.221	SD of Detected Logged Data	0.964

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.815	d2max (for USL)	2.234

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.734	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.762	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.358	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.343	Data Not Normal at 5% Significance Level	

Data Not Normal at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

KM Mean	0.709	KM SD	0.752
95% UTL95% Coverage	2.826	95% KM UPL (t)	2.132
90% KM Percentile (z)	1.673	95% KM Percentile (z)	1.946
99% KM Percentile (z)	2.458	95% KM USL	2.389

DL/2 Substitution Background Statistics Assuming Normal Distribution

Mean	0.619	SD	0.839
95% UTL95% Coverage	2.98	95% UPL (t)	2.207
90% Percentile (z)	1.694	95% Percentile (z)	1.999
99% Percentile (z)	2.57	95% USL	2.493

DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.788	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.686	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.375	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.362	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.501	k star (bias corrected MLE)	0.734
Theta hat (MLE)	0.772	Theta star (bias corrected MLE)	1.58
nu hat (MLE)	15.01	nu star (bias corrected)	7.336
MLE Mean (bias corrected)	1.159		
MLE Sd (bias corrected)	1.353	95% Percentile of Chisquare (2kstar)	4.91

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.532
Maximum	2.4	Median	0.01
SD	0.892	CV	1.676
k hat (MLE)	0.341	k star (bias corrected MLE)	0.308
Theta hat (MLE)	1.562	Theta star (bias corrected MLE)	1.726
nu hat (MLE)	7.497	nu star (bias corrected)	6.786
MLE Mean (bias corrected)	0.532	MLE Sd (bias corrected)	0.958
95% Percentile of Chisquare (2kstar)	2.797	90% Percentile	1.565
95% Percentile	2.413	99% Percentile	4.611

The following statistics are computed using Gamma ROS Statistics on Imputed Data
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	5.875	7.654	95% Approx. Gamma UPL	2.722	3.029
95% Gamma USL	3.703	4.377			

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.709	SD (KM)	0.752
Variance (KM)	0.565	SE of Mean (KM)	0.253
k hat (KM)	0.889	k star (KM)	0.707
nu hat (KM)	19.56	nu star (KM)	15.56
theta hat (KM)	0.797	theta star (KM)	1.002
80% gamma percentile (KM)	1.165	90% gamma percentile (KM)	1.775
95% gamma percentile (KM)	2.404	99% gamma percentile (KM)	3.904

The following statistics are computed using gamma distribution and KM estimates
Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods

	WH	HW		WH	HW
95% Approx. Gamma UTL with 95% Coverage	3.283	3.388	95% Approx. Gamma UPL	2.037	2.022
95% KM Gamma Percentile	1.767	1.738	95% Gamma USL	2.452	2.466

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.751	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.762	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.342	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.343	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects

Mean in Original Scale	0.557	Mean in Log Scale	-1.786
SD in Original Scale	0.877	SD in Log Scale	1.694
95% UTL95% Coverage	19.72	95% BCA UTL95% Coverage	2.4
95% Bootstrap (%) UTL95% Coverage	2.4	95% UPL (t)	4.138
90% Percentile (z)	1.469	95% Percentile (z)	2.718
99% Percentile (z)	8.619	95% USL	7.37

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean of Logged Data	-0.699	95% KM UTL (Lognormal)95% Coverage	3.845
KM SD of Logged Data	0.727	95% KM UPL (Lognormal)	1.968
95% KM Percentile Lognormal (z)	1.643	95% KM USL (Lognormal)	2.521

Background DL/2 Statistics Assuming Lognormal Distribution

Mean in Original Scale	0.619	Mean in Log Scale	-1.072
SD in Original Scale	0.839	SD in Log Scale	1.018
95% UTL95% Coverage	6.005	95% UPL (t)	2.35
90% Percentile (z)	1.261	95% Percentile (z)	1.825
99% Percentile (z)	3.652	95% USL	3.324

DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	11	95% UTL with95% Coverage	2.4
Approx, f used to compute achieved CC	0.579	Approximate Actual Confidence Coefficient achieved by UTL	0.431
Approximate Sample Size needed to achieve specified CC	59	95% UPL	2.4
95% USL	2.4	95% KM Chebyshev UPL	4.132

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Result (general chemistry - 7 day leach - total dissolved solids)

General Statistics

Total Number of Observations	10	Number of Distinct Observations	10
Minimum	112	First Quartile	145.8
Second Largest	180	Median	166
Maximum	270	Third Quartile	175.5
Mean	167.5	SD	42
Coefficient of Variation	0.251	Skewness	1.584
Mean of logged Data	5.096	SD of logged Data	0.231

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.911	d2max (for USL)	2.176

Normal GOF Test

Shapiro Wilk Test Statistic	0.843	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.842	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.283	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.262	Data Not Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Background Statistics Assuming Normal Distribution

95% UTL with 95% Coverage	289.8	90% Percentile (z)	221.3
95% UPL (t)	248.2	95% Percentile (z)	236.6
95% USL	258.9	99% Percentile (z)	265.2

Gamma GOF Test

A-D Test Statistic	0.516	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.725	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.245	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.266	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	20.04	k star (bias corrected MLE)	14.09
Theta hat (MLE)	8.358	Theta star (bias corrected MLE)	11.88
nu hat (MLE)	400.8	nu star (bias corrected)	281.9
MLE Mean (bias corrected)	167.5	MLE Sd (bias corrected)	44.62

Background Statistics Assuming Gamma Distribution

95% Wilson Hilferty (WH) Approx. Gamma UPL	251.6	90% Percentile	226.6
95% Hawkins Wixley (HW) Approx. Gamma UPL	252.2	95% Percentile	247
95% WH Approx. Gamma UTL with 95% Coverage	306.2	99% Percentile	288.3
95% HW Approx. Gamma UTL with 95% Coverage	309.2		
95% WH USL	264.9	95% HW USL	266

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.919	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.842	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.237	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.262	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
95/95 Upper Tolerance Limits with Outliers Excluded
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Background Statistics assuming Lognormal Distribution

95% UTL with	95% Coverage	320.2	90% Percentile (z)		219.7
	95% UPL (t)	254.8	95% Percentile (z)		238.9
	95% USL	270.2	99% Percentile (z)		279.7

Nonparametric Distribution Free Background Statistics
Data appear Approximate Normal at 5% Significance Level

Nonparametric Upper Limits for Background Threshold Values

Order of Statistic, r		10	95% UTL with	95% Coverage	270
Approx, f used to compute achieved CC		0.526	Approximate Actual Confidence Coefficient achieved by UTL		0.401
			Approximate Sample Size needed to achieve specified CC		59
95% Percentile Bootstrap UTL with	95% Coverage	270	95% BCA Bootstrap UTL with	95% Coverage	270
	95% UPL	270		90% Percentile	189
	90% Chebyshev UPL	299.7		95% Percentile	229.5
	95% Chebyshev UPL	359.5		99% Percentile	261.9
	95% USL	270			

Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.
Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers
and consists of observations collected from clean unimpacted locations.
The use of USL tends to provide a balance between false positives and false negatives provided the data
represents a background data set and when many onsite observations need to be compared with the BTV.

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Goodness-of-Fit Test for Potential Outlier Dataset with the Potential Outlier Excluded from Testing
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Goodness-of-Fit Test Statistics for Uncensored Full Data Sets without Non-Detects

User Selected Options

Date/Time of Computation	ProUCL 5.17/25/2021 11:06:33 AM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	0.95

Result (general chemistry - soluble - sulfate)

Raw Statistics

Number of Valid Observations	11
Number of Distinct Observations	11
Minimum	18
Maximum	158
Mean of Raw Data	63.76
Standard Deviation of Raw Data	43.49
Khat	2.655
Theta hat	24.02
Kstar	1.991
Theta star	32.02
Mean of Log Transformed Data	3.955
Standard Deviation of Log Transformed Data	0.667

Normal GOF Test Results

Correlation Coefficient R	0.931
Shapiro Wilk Test Statistic	0.867
Shapiro Wilk Critical (0.05) Value	0.85
Approximate Shapiro Wilk P Value	0.0702
Lilliefors Test Statistic	0.239
Lilliefors Critical (0.05) Value	0.251

Data appear Normal at (0.05) Significance Level

Gamma GOF Test Results

Correlation Coefficient R	0.985
A-D Test Statistic	0.286
A-D Critical (0.05) Value	0.735
K-S Test Statistic	0.176
K-S Critical(0.05) Value	0.258

Data appear Gamma Distributed at (0.05) Significance Level

Lognormal GOF Test Results

Correlation Coefficient R	0.987
Shapiro Wilk Test Statistic	0.969
Shapiro Wilk Critical (0.05) Value	0.85
Approximate Shapiro Wilk P Value	0.91
Lilliefors Test Statistic	0.14
Lilliefors Critical (0.05) Value	0.251

Data appear Lognormal at (0.05) Significance Level

Result (metals - barium)

Raw Statistics

Number of Valid Observations	11
Number of Distinct Observations	11
Minimum	37.4
Maximum	368
Mean of Raw Data	239.9
Standard Deviation of Raw Data	119.8
Khat	2.398
Theta hat	100
Kstar	1.805
Theta star	132.9
Mean of Log Transformed Data	5.257
Standard Deviation of Log Transformed Data	0.832

Normal GOF Test Results

Correlation Coefficient R	0.915
Shapiro Wilk Test Statistic	0.823
Shapiro Wilk Critical (0.05) Value	0.85
Approximate Shapiro Wilk P Value	0.027
Lilliefors Test Statistic	0.314
Lilliefors Critical (0.05) Value	0.251

Data not Normal at (0.05) Significance Level

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Goodness-of-Fit Test for Potential Outlier Dataset with the Potential Outlier Excluded from Testing
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Gamma GOF Test Results

Correlation Coefficient R	0.812
A-D Test Statistic	1.341
A-D Critical (0.05) Value	0.737
K-S Test Statistic	0.375
K-S Critical(0.05) Value	0.258

Data not Gamma Distributed at (0.05) Significance Level

Lognormal GOF Test Results

Correlation Coefficient R	0.856
Shapiro Wilk Test Statistic	0.725
Shapiro Wilk Critical (0.05) Value	0.85
Approximate Shapiro Wilk P Value	0.00161
Lilliefors Test Statistic	0.38
Lilliefors Critical (0.05) Value	0.251

Data not Lognormal at (0.05) Significance Level

Non-parametric GOF Test Results

Data do not follow a discernible distribution at (0.05) Level of Significance

Result (general chemistry - soluble - chloride)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	11	0	11	10	1	9.09%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	1	4.82	4.82	4.82	4.82	N/A
Statistics (Non-Detects Only)	10	5.94	29.3	12.86	11.3	8.203
Statistics (All: NDs treated as DL value)	11	4.82	29.3	12.13	11	8.151
Statistics (All: NDs treated as DL/2 value)	11	2.41	29.3	11.91	11	8.396
Statistics (Normal ROS Imputed Data)	11	-5.723	29.3	11.17	11	9.59
Statistics (Gamma ROS Imputed Data)	11	0.01	29.3	11.69	11	8.694
Statistics (Lognormal ROS Imputed Data)	11	2.846	29.3	11.95	11	8.348

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	3.396	2.444	3.788	2.4	0.564	0.235
Statistics (NDs = DL)	3.079	2.3	3.94	2.325	0.59	0.254
Statistics (NDs = DL/2)	2.47	1.857	4.822	2.262	0.704	0.311
Statistics (Gamma ROS Estimates)	0.846	0.676	13.81	1.763	2.179	1.236
Statistics (Lognormal ROS Estimates)	--	--	--	2.277	0.673	0.296

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.887	0.887	0.91	0.94

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.783	0.842	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.786	0.85	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.831	0.85	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.899	0.85	Data Appear Normal
Lilliefors (Detects Only)	0.318	0.262	Data Not Normal
Lilliefors (NDs = DL)	0.3	0.251	Data Not Normal
Lilliefors (NDs = DL/2)	0.29	0.251	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.263	0.251	Data Not Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.948	0.952	0.962	0.952

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	0.654	0.731	
Kolmogorov-Smirnov (Detects Only)	0.248	0.268	Detected Data Appear Gamma Distributed
Anderson-Darling (NDs = DL)	0.626	0.733	
Kolmogorov-Smirnov (NDs = DL)	0.222	0.257	Data Appear Gamma Distributed
Anderson-Darling (NDs = DL/2)	0.42	0.736	
Kolmogorov-Smirnov (NDs = DL/2)	0.204	0.258	Data Appear Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	1.13	0.758	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.338	0.264	Data Not Gamma Distributed

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Goodness-of-Fit Test for Potential Outlier Dataset with the Potential Outlier Excluded from Testing
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.948	0.959	0.969	0.973

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.883	0.842	Data Appear Lognormal
Shapiro-Wilk (NDs = DL)	0.909	0.85	Data Appear Lognormal
Shapiro-Wilk (NDs = DL/2)	0.947	0.85	Data Appear Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.95	0.85	Data Appear Lognormal
Lilliefors (Detects Only)	0.212	0.262	Data Appear Lognormal
Lilliefors (NDs = DL)	0.185	0.251	Data Appear Lognormal
Lilliefors (NDs = DL/2)	0.172	0.251	Data Appear Lognormal
Lilliefors (Lognormal ROS Estimates)	0.174	0.251	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Result (general chemistry - soluble - nitrate as n)

Raw Statistics

Number of Valid Observations	9
Number of Distinct Observations	9
Minimum	1.52
Maximum	2.83
Mean of Raw Data	2.109
Standard Deviation of Raw Data	0.477
Khat	22.1
Theta hat	0.0954
Kstar	14.81
Theta star	0.142
Mean of Log Transformed Data	0.723
Standard Deviation of Log Transformed Data	0.227

Normal GOF Test Results

Correlation Coefficient R	0.979
Shapiro Wilk Test Statistic	0.937
Shapiro Wilk Critical (0.05) Value	0.829
Approximate Shapiro Wilk P Value	0.736
Lilliefors Test Statistic	0.127
Lilliefors Critical (0.05) Value	0.274

Data appear Normal at (0.05) Significance Level

Gamma GOF Test Results

Correlation Coefficient R	0.981
A-D Test Statistic	0.252
A-D Critical (0.05) Value	0.721
K-S Test Statistic	0.147
K-S Critical(0.05) Value	0.279

Data appear Gamma Distributed at (0.05) Significance Level

Lognormal GOF Test Results

Correlation Coefficient R	0.984
Shapiro Wilk Test Statistic	0.945
Shapiro Wilk Critical (0.05) Value	0.829
Approximate Shapiro Wilk P Value	0.827
Lilliefors Test Statistic	0.136
Lilliefors Critical (0.05) Value	0.274

Data appear Lognormal at (0.05) Significance Level

Result (general chemistry - phenols, total)

	Num Obs	Num Miss	Num Valid	Detects	NDs	% NDs
Raw Statistics	11	0	11	5	6	54.55%

	Number	Minimum	Maximum	Mean	Median	SD
Statistics (Non-Detects Only)	6	0.334	0.338	0.337	0.338	0.00183
Statistics (Non-Detects Only)	5	0.358	2.4	1.159	0.429	1.044
Statistics (All: NDs treated as DL value)	11	0.334	2.4	0.711	0.338	0.788
Statistics (All: NDs treated as DL/2 value)	11	0.167	2.4	0.619	0.169	0.839
Statistics (Normal ROS Imputed Data)	11	-3.211	2.4	-0.531	-0.915	1.829
Statistics (Gamma ROS Imputed Data)	11	0.01	2.4	0.532	0.01	0.892
Statistics (Lognormal ROS Imputed Data)	11	0.014	2.4	0.557	0.117	0.877

	K hat	K Star	Theta hat	Log Mean	Log Stdv	Log CV
Statistics (Non-Detects Only)	1.501	0.734	0.772	-0.221	0.964	-4.359
Statistics (NDs = DL)	1.565	1.199	0.454	-0.694	0.76	-1.094
Statistics (NDs = DL/2)	0.978	0.772	0.633	-1.072	1.018	-0.949
Statistics (Gamma ROS Estimates)	0.341	0.308	1.562	-2.612	2.369	-0.907
Statistics (Lognormal ROS Estimates)	--	--	--	-1.786	1.694	-0.948

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Goodness-of-Fit Test for Potential Outlier Dataset with the Potential Outlier Excluded from Testing
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Normal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Normal ROS
Correlation Coefficient R	0.873	0.722	0.765	0.972

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.734	0.762	Data Not Normal
Shapiro-Wilk (NDs = DL)	0.526	0.85	Data Not Normal
Shapiro-Wilk (NDs = DL/2)	0.586	0.85	Data Not Normal
Shapiro-Wilk (Normal ROS Estimates)	0.934	0.85	Data Appear Normal
Lilliefors (Detects Only)	0.358	0.343	Data Not Normal
Lilliefors (NDs = DL)	0.458	0.251	Data Not Normal
Lilliefors (NDs = DL/2)	0.408	0.251	Data Not Normal
Lilliefors (Normal ROS Estimates)	0.162	0.251	Data Appear Normal

Gamma GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Gamma ROS
Correlation Coefficient R	0.89	0.865	0.912	0.932

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Anderson-Darling (Detects Only)	0.788	0.686	
Kolmogorov-Smirnov (Detects Only)	0.375	0.362	Data Not Gamma Distributed
Anderson-Darling (NDs = DL)	2.563	0.742	
Kolmogorov-Smirnov (NDs = DL)	0.438	0.26	Data Not Gamma Distributed
Anderson-Darling (NDs = DL/2)	1.681	0.753	
Kolmogorov-Smirnov (NDs = DL/2)	0.315	0.263	Data Not Gamma Distributed
Anderson-Darling (Gamma ROS Estimates)	1.204	0.812	
Kolmogorov-Smirnov (Gamma ROS Est.)	0.345	0.274	Data Not Gamma Distributed

Lognormal GOF Test Results

	No NDs	NDs = DL	NDs = DL/2	Log ROS
Correlation Coefficient R	0.883	0.755	0.857	0.973

	Test value	Crit. (0.05)	Conclusion with Alpha(0.05)
Shapiro-Wilk (Detects Only)	0.751	0.762	Data Not Lognormal
Shapiro-Wilk (NDs = DL)	0.57	0.85	Data Not Lognormal
Shapiro-Wilk (NDs = DL/2)	0.722	0.85	Data Not Lognormal
Shapiro-Wilk (Lognormal ROS Estimates)	0.933	0.85	Data Appear Lognormal
Lilliefors (Detects Only)	0.342	0.343	Data Appear Lognormal
Lilliefors (NDs = DL)	0.398	0.251	Data Not Lognormal
Lilliefors (NDs = DL/2)	0.301	0.251	Data Not Lognormal
Lilliefors (Lognormal ROS Estimates)	0.162	0.251	Data Appear Lognormal

Note: Substitution methods such as DL or DL/2 are not recommended.

Result (general chemistry - 7 day leach - total dissolved solids)

Raw Statistics

Number of Valid Observations	10
Number of Distinct Observations	10
Minimum	112
Maximum	270
Mean of Raw Data	167.5
Standard Deviation of Raw Data	42
Khat	20.04
Theta hat	8.358
Kstar	14.09
Theta star	11.88
Mean of Log Transformed Data	5.096
Standard Deviation of Log Transformed Data	0.231

Normal GOF Test Results

Correlation Coefficient R	0.902
Shapiro Wilk Test Statistic	0.843
Shapiro Wilk Critical (0.05) Value	0.842
Approximate Shapiro Wilk P Value	0.0265
Lilliefors Test Statistic	0.283
Lilliefors Critical (0.05) Value	0.262

Data appear Approximate Normal at (0.05) Significance Level

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Goodness-of-Fit Test for Potential Outlier Dataset with the Potential Outlier Excluded from Testing
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Gamma GOF Test Results

Correlation Coefficient R	0.925
A-D Test Statistic	0.516
A-D Critical (0.05) Value	0.725
K-S Test Statistic	0.245
K-S Critical(0.05) Value	0.266

Data appear Gamma Distributed at (0.05) Significance Level

Lognormal GOF Test Results

Correlation Coefficient R	0.944
Shapiro Wilk Test Statistic	0.919
Shapiro Wilk Critical (0.05) Value	0.842
Approximate Shapiro Wilk P Value	0.208
Lilliefors Test Statistic	0.237
Lilliefors Critical (0.05) Value	0.262

Data appear Lognormal at (0.05) Significance Level

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Dixon's Statistical Outlier Test for Potential Outlier Dataset
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Outlier Tests for Selected Uncensored Variables

User Selected Options

Date/Time of Computation	ProUCL 5.17/25/2021 11:09:59 AM
From File	WorkSheet.xls
Full Precision	OFF

Dixon's Outlier Test for Result (general chemistry - soluble - sulfate)

Number of Observations = 12
10% critical value: 0.49
5% critical value: 0.546
1% critical value: 0.642

1. Observation Value 935 is a Potential Outlier (Upper Tail)?

Test Statistic: 0.889

For 10% significance level, 935 is an outlier.
For 5% significance level, 935 is an outlier.
For 1% significance level, 935 is an outlier.

2. Observation Value 18 is a Potential Outlier (Lower Tail)?

Test Statistic: 0.072

For 10% significance level, 18 is not an outlier.
For 5% significance level, 18 is not an outlier.
For 1% significance level, 18 is not an outlier.

Dixon's Outlier Test for Result (general chemistry - soluble - nitrate as n)

Number of Observations = 10
10% critical value: 0.409
5% critical value: 0.477
1% critical value: 0.597

1. Observation Value 4.26 is a Potential Outlier (Upper Tail)?

Test Statistic: 0.530

For 10% significance level, 4.26 is an outlier.
For 5% significance level, 4.26 is an outlier.
For 1% significance level, 4.26 is not an outlier.

2. Observation Value 1.52 is a Potential Outlier (Lower Tail)?

Test Statistic: 0.031

For 10% significance level, 1.52 is not an outlier.
For 5% significance level, 1.52 is not an outlier.
For 1% significance level, 1.52 is not an outlier.

Dixon's Outlier Test for Result (general chemistry - 7 day leach - total dissolved solids)

Number of Observations = 11
10% critical value: 0.517
5% critical value: 0.576
1% critical value: 0.679

1. Observation Value 370 is a Potential Outlier (Upper Tail)?

Test Statistic: 0.798

For 10% significance level, 370 is an outlier.
For 5% significance level, 370 is an outlier.
For 1% significance level, 370 is an outlier.

2. Observation Value 112 is a Potential Outlier (Lower Tail)?

Test Statistic: 0.184

For 10% significance level, 112 is not an outlier.
For 5% significance level, 112 is not an outlier.
For 1% significance level, 112 is not an outlier.

Appendix E. ProUCL Outputs of Background Soil Descriptive Statistics, Outlier Testing, and Interval Estimator Statistics
Dixon's Statistical Outlier Test for Potential Outlier Dataset
Chevron Environmental Management Company (CEMC)
Jal Landfarm NM-02-0012
Centralized Surface Waste Management Facility
Lea County, New Mexico

Dixon's Outlier Test for Result (general chemistry - soluble - chloride)

Total N = 12
Number NDs = 1
Number Detects = 11
Number Data (n) = 12
10% critical value: 0.49
5% critical value: 0.546
1% critical value: 0.642
Note: NDs replaced by DL/2 in Outlier Test

1. Data Value 3.68386691229039 is a Potential Outlier (Upper Tail)?

Test Statistic: 0.228

For 10% significance level, 3.68386691229039 is not an outlier.
For 5% significance level, 3.68386691229039 is not an outlier.
For 1% significance level, 3.68386691229039 is not an outlier.

2. Data Value 0.786386964031255 is a Potential Outlier (Lower Tail)?

Test Statistic: 0.395

For 10% significance level, 0.786386964031255 is not an outlier.
For 5% significance level, 0.786386964031255 is not an outlier.
For 1% significance level, 0.786386964031255 is not an outlier.

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Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Friday, May 27, 2022 3:08 PM
To: Martinez, Armando
Cc: SteveRice@arcadis.com
Subject: NM2-012 Jal Landfarm background sampling report
Attachments: 2022 0527 NM2-012 Chevron Background Sampling Report approval signed.pdf

Mr. Martinez,

Please see the attached approval of the May 2, 2022, background sampling report for the Jal Landfarm, permit NM2-012. If you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

Brad A. Jones

Brad A. Jones ● Environmental Scientist Specialist - Advanced
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State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
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May 27, 2022

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Questa, New Mexico 87556-04698
amarti@chevron.com

RE: Approval of the Background Sampling Report
Chevron USA Inc. (OGRID 4323)
Jal Landfarm, Permit NM2-012
Location: W/2 of Section 17, Township 24 South, Range 36 East, NMPM
Lea County, New Mexico

Dear Mr. Martinez:

The Oil Conservation Division (OCD) has completed its review of Chevron Environmental Management Company's (CEMC) revised background sampling report, dated May 2, 2022, for the centralized surface waste management facility, Jal Landfarm under permit NM2-012. OCD hereby grants CEMC approval of the May 2, 2022 revised background sampling report, with the following recognitions and conditions:

1. CEMC shall comply with all applicable requirements of the Oil and Gas Act (Chapter 70, Article 2 NMSA 1978), the existing permit NM2-012, the transitional provisions of 19.15.36.20 NMAC, and all conditions specified in this approval;

2. CEMC shall utilize the background soil concentrations and PQLs values provided under the 95-95 UTL column of Table 6: Final Background Soil Descriptive Statistics (i.e., UTLs) for Datasets Excluding Outliers, provided in the May 2, 2022 revised background sampling report, to compare to the vadose zone monitoring results to determine whether a release has occurred;

3. CEMC shall compare thiolane 1,1 dioxide (sulfolane) (CAS 126-33-0) analytical results to the laboratory practical quantification limit (PQL) used to assess each result as a non-detect to determine if a potential release of this compound has occurred, since a facility background concentration or PQL was not determined or proposed;

4. CEMC will not analyze vadose samples for bis (chloromethyl) ether (CAS 542-88-1), due to its fast degradation rate and the inability of the laboratory not being able to perform analysis for this compound; and

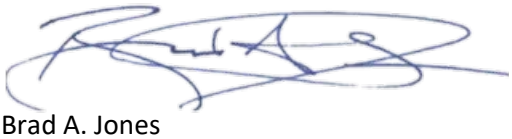
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5. CEMC must submit a closure and post-closure care plan for OCD review and approval prior to utilizing the background soil concentrations and PQLs values provided under the 95-95 UTL column of Table 6: Final Background Soil Descriptive Statistics (i.e., UTLs) for Datasets Excluding Outliers, provided in the May 2, 2022 revised background sampling report, for the metals required of 19.15.36.15.(F) NMAC, as demonstrated by EPA methods 6020 and 7471A.

Please be advised that approval of this request does not relieve CEMC of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve CEMC of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to email me at brad.a.jones@state.nm.us.

Respectfully,



Brad A. Jones
Environmental Specialist

cc: Steve Rice, Arcadis U.S., Inc., SteveRice@arcadis.com

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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
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CONDITIONS

Action 104257

CONDITIONS

Operator:	OGRID:
CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	4323
	Action Number: 104257
	Action Type: [C-137] Non-Fee SWMF Submittal (SWMF NON-FEE SUBMITTAL)

CONDITIONS

Created By	Condition	Condition Date
bjones	OCD emailed the approval to Armando Martinez (Chevron) and Steve Rice (Arcadis) on May 27, 2022. Please see the OCD's Response attached to the bottom of the report for the conditions of approval.	5/27/2022